

Oral Presenters

Name	Date	Time	Room	Page Number	Name	Date	Time	Room	Page Number
A					Downes, R.	4-Jun	4:20PM	Pelican	34
Abdul-Aziz, A.	3-Jun	11:30AM	Pelican	24	Dubey, V.	4-Jun	4:40PM	Osprey	32
Airoldi, A.	2-Jun	10:30AM	Osprey	13	Dunn, B.	4-Jun	10:20AM	Tidepool 1	26
Akaoglu, C.	4-Jun	11:40AM	Silver Pearl 1	28	E				
Akhtar, F.	1-Jun	4:30PM	Sandpiper B	7	El Khomsj, A.	3-Jun	11:20AM	Sandpiper A	22
Alexander, J.	4-Jun	2:00PM	Silver Pearl 2/3	34	El Melhoufi, A.	2-Jun	9:20AM	Osprey	13
Alkan, G.	3-Jun	11:40AM	Sandpiper A	22	Emdadi, A.	4-Jun	3:52PM	Silver Pearl 2/3	34
Almeida, R.S.	3-Jun	10:50AM	Pelican	24	Evers, C.	4-Jun	4:50PM	Pelican	34
Almeida, R.S.	4-Jun	9:50AM	Shorebreak 1	27	F				
Ammendola, M.J.	2-Jun	2:10PM	Osprey	17	Fanchini, G.	4-Jun	4:40PM	Sandpiper C	30
Anderson, K.	1-Jun	4:50PM	Sandpiper C	6	Faral, M.	2-Jun	10:50AM	Sandpiper B	11
Andi, U.	3-Jun	8:30AM	Pelican	23	Feehan, M.	1-Jun	4:40PM	Silver Pearl 1-3	7
Arai, Y.	1-Jun	3:50PM	Silver Pearl 1-3	7	Feldbauer, J.	2-Jun	11:50AM	Sandpiper B	12
Arregui-Mena, J.D.	4-Jun	4:42PM	Silver Pearl 2/3	34	Ferraris, M.	1-Jun	2:40PM	Sandpiper D	9
Augeard, C.	3-Jun	10:40AM	Sandpiper C	20	Fischer, J.	3-Jun	9:00AM	Sandpiper A	21
B					Flores, M.	4-Jun	3:22PM	Silver Pearl 2/3	34
Back, C.A.	1-Jun	8:45AM	Silver Pearl 1-3	5	Fourcade, J.	1-Jun	2:30PM	Shorebreak 2	5
Badran, A.	2-Jun	11:50AM	Pelican	14	Friess, M.	4-Jun	2:00PM	Silver Pearl 1	33
Baier, L.	2-Jun	1:50PM	Osprey	16	Fuchigami, T.	4-Jun	10:20AM	Sandpiper B	27
Balagna, C.	4-Jun	2:00PM	Sandpiper A	31	Fujiwara, K.	2-Jun	8:30AM	Sandpiper C	10
Ban, C.	2-Jun	11:50AM	Tidepool 1	11	Furuse, H.	2-Jun	11:10AM	Sandpiper C	10
Banas, W.	1-Jun	4:40PM	Osprey	8	G				
Bechelany, M.	2-Jun	2:00PM	Silver Pearl 1-3	16	Garnier, A.	1-Jun	4:50PM	Pelican	9
Bedford, N.	2-Jun	8:50AM	Sandpiper A	12	Ghoshal, A.	2-Jun	9:30AM	Shorebreak 1	14
Beringue, R.	4-Jun	9:20AM	Osprey	29	Gilder, J.	4-Jun	11:00AM	Silver Pearl 1	28
Bernard, S.	1-Jun	4:00PM	Sandpiper A	7	Gilmer, D.	4-Jun	2:30PM	Sandpiper D	30
Bhattacharyya, A.J.	2-Jun	11:20AM	Tidepool 1	11	Golightly, E.S.	2-Jun	11:00AM	Osprey	13
Bianchini, M.	4-Jun	9:00AM	Tidepool 1	26	Golightly, E.S.	4-Jun	10:40AM	Silver Pearl 2/3	29
Bouillon, E.	2-Jun	1:30PM	Shorebreak 1	17	Gonderman, S.	2-Jun	1:30PM	Sandpiper D	17
Bourlet, F.	2-Jun	2:00PM	Sandpiper D	17	Goodman, B.	4-Jun	3:20PM	Pelican	33
Brandt, O.	2-Jun	11:40AM	Silver Pearl 1-3	12	Goto, T.	4-Jun	1:30PM	Shorebreak 1	32
Bull, K.C.	1-Jun	4:20PM	Silver Pearl 1-3	7	Gouma, P.	1-Jun	3:30PM	Shorebreak 2	5
C					Gouma, P.	4-Jun	10:20AM	Sandpiper A	26
Callaway, B.	2-Jun	11:30AM	Pelican	13	Gouma, P.	4-Jun	2:50PM	Shorebreak 1	32
Camacho Ramirez, A.D.	4-Jun	9:40AM	Silver Pearl 2/3	29	Gourley, A.	4-Jun	11:20AM	Silver Pearl 1	28
Caporale, A.	1-Jun	2:30PM	Shorebreak 1	9	Graeve, O.A.	4-Jun	10:50AM	Sandpiper A	27
Carlier, D.	1-Jun	2:35PM	Tidepool 1	6	Graeve, O.A.	4-Jun	2:00PM	Sandpiper D	30
Carty, W.M.	2-Jun	9:00AM	Pelican	13	Gross, H.	3-Jun	9:20AM	Osprey	23
Casalegno, V.	1-Jun	1:30PM	Sandpiper D	9	Guignard, M.	1-Jun	4:20PM	Tidepool 1	6
Castellanos, A.G.	1-Jun	2:00PM	Osprey	8	Guiho, M.	4-Jun	4:20PM	Osprey	32
Castellanos, A.G.	5-Jun	9:20AM	Osprey	35	Guijosa Garcia, C.Y.	3-Jun	9:00AM	Silver Pearl 2/3	22
Cavalli, L.	2-Jun	11:10AM	Shorebreak 1	14	Guillet, F.	1-Jun	2:30PM	Pelican	8
Cekic-Laskovic, I.	2-Jun	8:30AM	Tidepool 1	11	Gupta, S.	2-Jun	2:40PM	Sandpiper B	16
Chaker, M.	4-Jun	1:30PM	Sandpiper C	29	Gupta, S.	3-Jun	9:40AM	Sandpiper C	20
Chenier, C.	3-Jun	11:20AM	Tidepool 1	20	H				
Cho, J.	4-Jun	4:10PM	Sandpiper D	30	Habans, D.	2-Jun	10:50AM	Pelican	13
Choi, H.	2-Jun	1:30PM	Sandpiper B	16	Habans, D.	3-Jun	11:00AM	Sandpiper A	22
Chotard, J.	3-Jun	8:30AM	Tidepool 1	20	Halbig, M.C.	5-Jun	9:30AM	Silver Pearl 2/3	35
Chung, J.J.	4-Jun	3:20PM	Sandpiper A	31	Han, S.	2-Jun	2:20PM	Sandpiper B	16
Chung, Y.	4-Jun	9:00AM	Sandpiper B	27	Hanzel, O.	3-Jun	11:40AM	Osprey	23
Cogbill, D.M.	3-Jun	11:10AM	Sandpiper D	25	Haruyama, D.	3-Jun	9:00AM	Pelican	23
Compton, B.G.	1-Jun	3:30PM	Sandpiper A	7	Hasegawa, M.	3-Jun	10:50AM	Silver Pearl 1	22
Couégnat, G.	4-Jun	3:20PM	Osprey	32	Heidenreich, B.	3-Jun	8:30AM	Silver Pearl 1	22
Courjault, F.	3-Jun	11:20AM	Osprey	23	Herbert, V.	2-Jun	9:40AM	Pelican	13
Croy, J.R.	1-Jun	3:20PM	Tidepool 1	6	Hickey, R.	2-Jun	1:52PM	Sandpiper A	16
Cutard, T.	2-Jun	8:30AM	Shorebreak 1	14	Hinoki, T.	2-Jun	1:30PM	Silver Pearl 1-3	16
D					Hinoki, T.	2-Jun	2:40PM	Sandpiper D	17
D'Ambrosio, R.	4-Jun	9:30AM	Sandpiper B	27	Hirales, A.	2-Jun	10:20AM	Sandpiper C	10
Davey, T.	1-Jun	1:30PM	Osprey	8	Hiroshiba, N.	2-Jun	9:00AM	Sandpiper C	10
De La Pierre, S.	3-Jun	11:20AM	Sandpiper B	21	Holles, S.	4-Jun	4:40PM	Shorebreak 1	33
De Stefano Fumo, M.	3-Jun	9:00AM	Shorebreak 1	24	Holowczak, J.E.	1-Jun	3:20PM	Sandpiper D	9
Denneulin, S.	2-Jun	11:30AM	Shorebreak 1	14	Hovsepian, A.	2-Jun	2:00PM	Sandpiper B	16
Denneulin, S.	2-Jun	2:00PM	Pelican	17	Huang, B.	3-Jun	10:20AM	Sandpiper D	25
Dey, M.	3-Jun	11:00AM	Sandpiper C	21	Huang, J.	4-Jun	3:50PM	Tidepool 1	31
Dickerson, M.B.	2-Jun	11:20AM	Silver Pearl 1-3	12	I				
Dillon, S.J.	4-Jun	8:30AM	Sandpiper D	25	Ida, S.	1-Jun	3:20PM	Pelican	8
Dixon, C.R.	4-Jun	2:00PM	Pelican	33	Iijima, M.	2-Jun	10:20AM	Sandpiper B	11
Dixon, C.R.	4-Jun	2:20PM	Pelican	33					
Dollé, M.	2-Jun	2:00PM	Tidepool 1	15					

*Denotes Presenter

Presenting Author List

Oral Presenters

Name	Date	Time	Room	Page Number	Name	Date	Time	Room	Page Number
Iijima, M.	4-Jun	9:00AM	Sandpiper C	26	Leide, A.J.	1-Jun	2:30PM	Silver Pearl 1-3	7
Ikegami, N.	2-Jun	2:50PM	Pelican	17	Lenz, B.	4-Jun	2:20PM	Osprey	32
Ilyas, S.	1-Jun	2:00PM	Shorebreak 2	5	Liu, D.	2-Jun	8:30AM	Pelican	13
Ishii, K.	3-Jun	11:10AM	Shorebreak 2	20	Liu, D.	3-Jun	9:00AM	Sandpiper D	24
Ivanov, I.	1-Jun	4:10PM	Shorebreak 1	9	Liu, J.	3-Jun	11:10AM	Silver Pearl 2/3	23
Ivanov, I.	4-Jun	2:00PM	Shorebreak 1	32	Loneragan, J.	1-Jun	3:20PM	Osprey	8
Iyoki, K.	3-Jun	8:30AM	Sandpiper C	20	Lu, K.	2-Jun	9:20AM	Sandpiper A	12
					Lu, K.	4-Jun	9:30AM	Sandpiper C	26
J					M				
Jacques, S.	5-Jun	8:30AM	Pelican	35	Maier, J.	2-Jun	10:50AM	Sandpiper D	14
Jakubinek, M.	2-Jun	2:22PM	Sandpiper A	16	Maier, J.	4-Jun	2:20PM	Shorebreak 1	32
Janszen, G.J.	4-Jun	2:40PM	Pelican	33	Malinverni, C.	4-Jun	4:12PM	Silver Pearl 2/3	34
Jefferson, G.	1-Jun	2:00PM	Pelican	8	Matsuda, Y.	1-Jun	5:10PM	Pelican	9
Jimba, Y.	3-Jun	10:50AM	Sandpiper D	25	Matsunaga, T.	1-Jun	2:00PM	Shorebreak 1	9
Johnson, N.B.	3-Jun	9:00AM	Tidepool 1	20	Matsushima, Y.	1-Jun	3:10PM	Shorebreak 2	5
Jones, J.	1-Jun	4:00PM	Sandpiper B	6	McCormack, S.J.	4-Jun	8:30AM	Osprey	29
Joyce, A.	5-Jun	9:20AM	Shorebreak 1	35	Mechnich, P.	3-Jun	10:20AM	Silver Pearl 2/3	22
Jung, S.	4-Jun	10:40AM	Silver Pearl 1	28	Michaelis, A.	1-Jun	11:20AM	Silver Pearl 1-3	5
Justin, J.	4-Jun	9:40AM	Osprey	29	Michaelis, A.	2-Jun	8:30AM	Sandpiper B	11
					Mitchell, D.	1-Jun	3:40PM	Shorebreak 1	9
K					Moon, S.	2-Jun	8:30AM	Osprey	13
K C, J.R.	2-Jun	9:30AM	Sandpiper C	10	Moore, A.	3-Jun	10:20AM	Sandpiper A	21
Kagawa, Y.	1-Jun	9:30AM	Silver Pearl 1-3	5	Mori, T.	3-Jun	10:20AM	Shorebreak 2	20
Kakisawa, H.	3-Jun	11:40AM	Silver Pearl 2/3	23	Morita, K.	4-Jun	9:00AM	Shorebreak 2	25
Kakisawa, H.	4-Jun	8:30AM	Silver Pearl 1	28	Mounérat, A.	4-Jun	11:20AM	Shorebreak 1	28
Kamiya, H.	3-Jun	9:30AM	Shorebreak 2	19	Müller, M.	2-Jun	2:10PM	Sandpiper C	15
Kamiya, H.	4-Jun	11:20AM	Sandpiper C	26					
Kanazawa, S.	2-Jun	2:20PM	Pelican	17	N				
Kang, S.	1-Jun	2:40PM	Sandpiper B	6	Nafis, T.	4-Jun	4:10PM	Sandpiper A	31
Katsui, H.	4-Jun	11:40AM	Shorebreak 1	28	Nakamura, T.	4-Jun	1:30PM	Silver Pearl 1	33
Khokar, P.	4-Jun	3:50PM	Pelican	33	Narayanan, B.	3-Jun	10:20AM	Tidepool 1	20
Kim, D.	3-Jun	9:00AM	Silver Pearl 1	22	Narita, A.	3-Jun	9:00AM	Sandpiper C	20
Kim, I.	2-Jun	11:10AM	Sandpiper B	11	Nguyen, K.T.	4-Jun	10:20AM	Silver Pearl 1	28
Kim, J.	1-Jun	2:05PM	Tidepool 1	6	Nguyen, T.	4-Jun	4:00PM	Silver Pearl 1	33
Kim, M.	4-Jun	2:30PM	Tidepool 1	31	Nishihara, H.	2-Jun	10:50AM	Tidepool 1	11
Kim, S.	1-Jun	2:00PM	Silver Pearl 1-3	7	Nishikawa, A.	2-Jun	2:30PM	Osprey	17
Kimani, P.K.	3-Jun	9:30AM	Sandpiper B	21	Nishimura, T.	2-Jun	2:30PM	Silver Pearl 1-3	16
Kimotho, G.	3-Jun	10:20AM	Sandpiper C	20	Norton, E.	4-Jun	3:40PM	Silver Pearl 1	33
King, D.	2-Jun	9:00AM	Silver Pearl 1-3	12	Nurak, I.S.	3-Jun	9:20AM	Silver Pearl 2/3	22
Kirihara, S.	1-Jun	3:30PM	Sandpiper B	6					
Kitamura, K.	3-Jun	10:50AM	Shorebreak 2	20	O				
Kobayashi, H.	4-Jun	9:30AM	Tidepool 1	26	Oba, K.	5-Jun	10:50AM	Osprey	35
Kobayashi, M.	1-Jun	2:30PM	Sandpiper C	5	Ogiya, T.	2-Jun	2:30PM	Shorebreak 2	15
Koch, D.	2-Jun	8:30AM	Silver Pearl 1-3	12	Ohashi, N.	4-Jun	10:50AM	Sandpiper C	26
Kondo, S.	3-Jun	9:20AM	Sandpiper D	24	Ohji, T.	4-Jun	11:30AM	Sandpiper D	26
Koo, B.	4-Jun	2:20PM	Sandpiper C	30	Ohno, S.	3-Jun	9:30AM	Tidepool 1	20
Kostogiannes, A.	2-Jun	1:50PM	Sandpiper C	15	Okanishi, O.	4-Jun	2:00PM	Sandpiper C	30
Kotani, M.	2-Jun	10:20AM	Silver Pearl 1-3	12	Okazaki, T.	2-Jun	9:40AM	Shorebreak 2	10
Koyanagi, T.	3-Jun	9:40AM	Sandpiper D	24	Okuma, G.	4-Jun	2:00PM	Sandpiper B	31
Kozien, D.D.	2-Jun	11:20AM	Sandpiper D	15	Olevsky, E.	4-Jun	8:30AM	Shorebreak 2	25
Kubota, Y.	3-Jun	9:30AM	Shorebreak 1	24	Opila, E.	3-Jun	8:30AM	Silver Pearl 2/3	22
Kusono, S.	3-Jun	9:40AM	Sandpiper A	21	Orikasa, Y.	2-Jun	10:20AM	Tidepool 1	11
					Ortona, A.	1-Jun	1:30PM	Silver Pearl 1-3	7
L					Ortona, A.	1-Jun	2:40PM	Sandpiper A	7
Laberge Lebel, L.	4-Jun	9:40AM	Silver Pearl 1	28					
Laine, R.M.	2-Jun	10:50AM	Sandpiper A	12	P				
Lakusta, M.	1-Jun	2:40PM	Osprey	8	Palumbo, A.	3-Jun	9:20AM	Silver Pearl 1	22
Lalli, J.H.	2-Jun	10:20AM	Pelican	13	Pamula, E.	4-Jun	2:30PM	Sandpiper A	31
Lamm, B.W.	1-Jun	2:20PM	Sandpiper D	9	Papageorgiou, V.	3-Jun	10:20AM	Silver Pearl 1	22
Langhof, N.	4-Jun	1:30PM	Pelican	33	Park, H.	1-Jun	3:50PM	Tidepool 1	6
Latour, M.	4-Jun	9:00AM	Silver Pearl 1	28	Park, H.	2-Jun	11:30AM	Sandpiper B	11
Laurin, F.	4-Jun	3:50PM	Osprey	32	Park, I.	4-Jun	2:00PM	Tidepool 1	31
Lee, H.	2-Jun	9:30AM	Tidepool 1	11	Park, J.	1-Jun	10:35AM	Silver Pearl 1-3	5
Lee, J.	2-Jun	11:10AM	Pelican	13	Park, J.	2-Jun	9:00AM	Osprey	13
Lee, J.	4-Jun	11:20AM	Sandpiper A	27	Park, M.	1-Jun	4:40PM	Shorebreak 1	9
Lee, K.	2-Jun	9:30AM	Sandpiper B	11	Park, Y.	2-Jun	10:40AM	Sandpiper C	10
Lee, S.	1-Jun	2:10PM	Sandpiper A	7	Parolini, N.D.	3-Jun	9:20AM	Pelican	23
Lee, S.	1-Jun	3:10PM	Shorebreak 1	9	Patel, P.	4-Jun	11:20AM	Sandpiper B	27
Lee, S.	4-Jun	1:30PM	Sandpiper A	31	Pedzich, Z.	2-Jun	10:20AM	Sandpiper D	14
Lee, S.	4-Jun	2:30PM	Silver Pearl 1	33	Pedzich, Z.	2-Jun	2:00PM	Shorebreak 2	15
Lee, S.	4-Jun	3:20PM	Silver Pearl 1	33	Ponder, J.	3-Jun	8:30AM	Sandpiper A	21
Lee, Y.	3-Jun	10:50AM	Osprey	23					

Oral Presenters

Name	Date	Time	Room	Page Number	Name	Date	Time	Room	Page Number
Postler, K.	4-Jun	4:20PM	Shorebreak 1	33	Simpson, W.	3-Jun	10:20AM	Pelican	24
Prabhu, V.J.	5-Jun	9:00AM	Silver Pearl 2/3	35	Singh, D.	1-Jun	2:20PM	Sandpiper B	6
Preston, A.	3-Jun	9:10AM	Shorebreak 2	19	Singh, D.	1-Jun	3:50PM	Sandpiper D	10
Pritzkow, W.	1-Jun	1:30PM	Pelican	8	Singh, H.	3-Jun	11:30AM	Sandpiper D	25
Pritzkow, W.	3-Jun	8:30AM	Shorebreak 1	24	Singh, K.P.	1-Jun	4:20PM	Osprey	8
Prum, T.	4-Jun	3:50PM	Sandpiper D	30	Singh, P.	4-Jun	4:20PM	Tidepool 1	31
Pruyn, T.	1-Jun	1:40PM	Sandpiper A	7	Smith, C.	2-Jun	1:30PM	Pelican	17
Puchas, G.	3-Jun	9:40AM	Silver Pearl 1	22	So, J.	3-Jun	9:20AM	Sandpiper A	21
Puchas, G.	3-Jun	10:20AM	Sandpiper B	21	Sobczak, M.	2-Jun	1:32PM	Sandpiper A	16
					Song, K.	4-Jun	3:20PM	Sandpiper D	30
		Q			Soni, A.	4-Jun	2:00PM	Osprey	32
Quan, J.	2-Jun	2:20PM	Sandpiper D	17	Springer Simonova, P.	4-Jun	1:30PM	Sandpiper B	31
Quiney, Z.	1-Jun	4:30PM	Pelican	9	Stiller, J.H.	3-Jun	8:30AM	Sandpiper B	21
					Sugahara, T.	1-Jun	3:50PM	Sandpiper C	5
		R			Sumino, M.	4-Jun	9:30AM	Shorebreak 1	27
Radovic, M.	1-Jun	3:50PM	Osprey	8	Suzuki, T.S.	4-Jun	11:10AM	Sandpiper D	26
Radovic, M.	3-Jun	8:30AM	Osprey	23	Swanson, R.	3-Jun	9:00AM	Osprey	23
Ranaiefar, M.	1-Jun	2:00PM	Sandpiper B	6					
Reimanis, I.	4-Jun	1:30PM	Sandpiper D	30			T		
Ren, S.	2-Jun	8:30AM	Sandpiper D	14	Takai-Yamashita, C.	1-Jun	1:30PM	Shorebreak 2	5
Riesner, J.	1-Jun	3:20PM	Silver Pearl 1-3	7	Tanaka, M.	4-Jun	8:30AM	Silver Pearl 2/3	28
Rikka, V.	4-Jun	3:20PM	Tidepool 1	31	Tanaka, S.	2-Jun	8:40AM	Shorebreak 2	10
Risbud, S.	2-Jun	11:40AM	Sandpiper C	11	Tang, Y.	5-Jun	9:00AM	Osprey	35
Rosei, F.	4-Jun	4:10PM	Sandpiper C	30	Taniguchi, H.	2-Jun	9:20AM	Pelican	13
Roy, A.	2-Jun	8:30AM	Sandpiper A	12	Tatami, J.	1-Jun	4:20PM	Sandpiper D	10
Roy, S.	3-Jun	11:30AM	Sandpiper C	21	Tatami, J.	2-Jun	11:00AM	Shorebreak 2	10
Rubink, W.	3-Jun	9:40AM	Osprey	23	Tatami, J.	4-Jun	9:00AM	Sandpiper D	25
Rudzik, T.	2-Jun	1:30PM	Sandpiper C	15	Tatarko, P.	2-Jun	9:00AM	Sandpiper D	14
Rufner, J.	4-Jun	10:50AM	Sandpiper D	25	Tatarko, P.	4-Jun	2:20PM	Silver Pearl 2/3	34
Rugg, K.	2-Jun	2:00PM	Shorebreak 1	17	Tatarkova, M.	4-Jun	2:40PM	Silver Pearl 2/3	34
Rumen, T.	4-Jun	2:40PM	Osprey	32	Teshima, S.	3-Jun	9:40AM	Pelican	24
					Toda, K.	1-Jun	2:00PM	Sandpiper C	5
		S			Toda, K.	1-Jun	3:20PM	Sandpiper C	5
Sajgalik, P.	2-Jun	9:30AM	Sandpiper D	14	Toda, K.	1-Jun	4:20PM	Sandpiper C	6
Sakai, M.	4-Jun	10:20AM	Shorebreak 2	25	Tokoro, C.	4-Jun	8:30AM	Sandpiper C	26
Salameh, C.	1-Jun	4:30PM	Sandpiper A	7	Toury, B.	2-Jun	10:10AM	Sandpiper A	12
Santo, L.	2-Jun	9:10AM	Shorebreak 2	10	Toury, B.	3-Jun	9:40AM	Silver Pearl 2/3	22
Sato, K.	3-Jun	9:20AM	Sandpiper C	20	Trieu, O.	5-Jun	9:00AM	Shorebreak 1	34
Sauder, C.	4-Jun	9:00AM	Shorebreak 1	27	Tsuchiya, T.	1-Jun	1:30PM	Sandpiper C	5
Saxena, S.	4-Jun	10:50AM	Tidepool 1	26	Tsujii, Y.	4-Jun	3:50PM	Sandpiper A	31
Sayama, M.	4-Jun	11:40AM	Sandpiper C	26					
Schmidt, J.	4-Jun	4:00PM	Shorebreak 1	33			U		
Schmidt, J.	5-Jun	9:00AM	Pelican	35	Unsel, S.	5-Jun	8:30AM	Osprey	35
Schonfeld, H.B.	4-Jun	9:00AM	Osprey	29					
Schonfeld, H.B.	4-Jun	10:20AM	Osprey	29			V		
Schukraft, J.	3-Jun	10:50AM	Sandpiper B	21	Valenzuela-Heeger, E.	4-Jun	9:20AM	Silver Pearl 1	28
Schwartz, J.	2-Jun	9:00AM	Sandpiper B	11	Valle, M.	1-Jun	1:30PM	Shorebreak 1	9
Sciti, D.	2-Jun	1:30PM	Osprey	16	Venkatachalam, V.	4-Jun	8:30AM	Sandpiper B	27
Scotson, D.	4-Jun	9:20AM	Silver Pearl 2/3	28	Vignoles, G.L.	2-Jun	9:30AM	Silver Pearl 1-3	12
Scotson, D.	4-Jun	10:50AM	Sandpiper B	27	Vignoles, G.L.	4-Jun	5:00PM	Osprey	32
Segawa, H.	4-Jun	10:20AM	Sandpiper D	25	Vignoles, G.L.	5-Jun	10:20AM	Osprey	35
Sekigawa, T.	4-Jun	10:30AM	Shorebreak 1	27	Vignoles, G.L.	5-Jun	11:10AM	Osprey	35
Senani - de Monredon, S.	4-Jun	4:30PM	Sandpiper D	30	Vinci, A.	2-Jun	9:40AM	Osprey	13
Sendeku, M.G.	4-Jun	3:40PM	Sandpiper C	30					
Seo, D.	2-Jun	1:30PM	Tidepool 1	15			W		
Seo, S.	1-Jun	1:30PM	Tidepool 1	6	W, J.D.	4-Jun	10:40AM	Osprey	29
Serrano, N.L.	4-Jun	11:00AM	Osprey	29	Wannenmacher, J.W.	1-Jun	2:20PM	Osprey	8
Sève, G.	4-Jun	9:00AM	Silver Pearl 2/3	28	Watanabe, F.	2-Jun	10:10AM	Shorebreak 1	14
Shaw, J.	1-Jun	3:50PM	Pelican	8	Wich, F.	3-Jun	9:00AM	Sandpiper B	21
Shi, D.	4-Jun	3:10PM	Sandpiper C	30	Wich, F.	4-Jun	11:00AM	Shorebreak 1	27
Shimamura, A.	1-Jun	1:30PM	Sandpiper B	6	Wickramathilaka, K.Y.	3-Jun	10:40AM	Sandpiper A	21
Shimamura, K.	2-Jun	2:40PM	Sandpiper C	15	Wright, A.	4-Jun	10:20AM	Silver Pearl 2/3	29
Shimamura, K.	4-Jun	9:30AM	Sandpiper D	25					
Shimoda, K.	4-Jun	8:30AM	Shorebreak 1	27			X		
Shin, H.	2-Jun	10:40AM	Shorebreak 1	14	Xu, P.	3-Jun	8:30AM	Sandpiper D	24
Shinoda, K.	3-Jun	10:40AM	Silver Pearl 2/3	23	Xu, W.	4-Jun	9:30AM	Shorebreak 2	25
Shirai, T.	3-Jun	8:40AM	Shorebreak 2	19					
Shirakawa, H.	2-Jun	10:30AM	Shorebreak 2	10			Y		
Shuster, S.P.	1-Jun	2:00PM	Sandpiper D	9	Yabuuchi, N.	2-Jun	2:30PM	Tidepool 1	15
Shuster, S.P.	2-Jun	11:50AM	Sandpiper D	15	Yadav, M.	5-Jun	9:40AM	Osprey	35
Simpson, W.	2-Jun	9:00AM	Shorebreak 1	14					

*Denotes Presenter

Presenting Author List

Oral Presenters

Name	Date	Time	Room	Page Number	Name	Date	Time	Room	Page Number
Yamada, Y.	2-Jun	9:00AM	Tidepool 1	11	Yun, H.	1-Jun	5:00PM	Silver Pearl 1-3	7
Yamaguchi, Y.	4-Jun	10:20AM	Sandpiper C	26	Yun, H.	4-Jun	10:50AM	Shorebreak 2	25
Yamamoto, K.	4-Jun	1:30PM	Tidepool 1	31			Z		
Yamazaki, N.	3-Jun	11:10AM	Pelican	24	Zackasee, J.	2-Jun	10:30AM	Sandpiper A	12
Yamazaki, R.	2-Jun	11:20AM	Shorebreak 2	10	Zhang, J.	4-Jun	11:20AM	Shorebreak 2	25
Yang, J.	5-Jun	8:30AM	Shorebreak 1	34	Zhang, W.	3-Jun	10:50AM	Tidepool 1	20
Yoon, D.	4-Jun	1:30PM	Silver Pearl 2/3	34	Zhou, Y.	1-Jun	4:10PM	Pelican	8
Yoshida, K.	2-Jun	10:50AM	Silver Pearl 1-3	12	Zok, F.W.	4-Jun	1:30PM	Osprey	32
Yoshida, M.	2-Jun	1:30PM	Shorebreak 2	15	Zok, F.W.	4-Jun	3:30PM	Shorebreak 1	33
Yu, W.	3-Jun	10:20AM	Osprey	23					

Poster Presenters

Name	Date	Time	Room	Page Number	Name	Date	Time	Room	Page Number
		B					M		
Baba, N.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Makowska, J.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
Beringue, R.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Masuda, R.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Bochenek, D.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19	Miyagishi, T.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Brzezinska, D.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19			O		
		C			Olivo, E.F.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Castro, M.T.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18			P		
		D			Park, S.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Dixon, C.R.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Pereira, M.d.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
		F					S		
Fisher, I.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Saito, T.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Fourcade, J.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Sandoval, L.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Furuse, H.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19	Seong, Y.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
		G			Shiratori, Y.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
Gramsch, A.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Sitarz, M.T.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
		H			Sobczak, M.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Harish, M.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18			T		
Honda, A.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Tak, W.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
Hossain, M.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Takemoto, R.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
		J			Teranishi, T.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
Jeon, S.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19			W		
Joo, Y.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Wich, F.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
		L			Wodecka-Dus, B.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
Langhof, N.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19			Y		
Lee, H.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18	Yang, J.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19
Lee, J.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	19			Z		
					Zered, M.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18
					Zhibo, C.	2-Jun	5:30PM	Corals Ballroom 3, 4, 5	18

Monday, June 1, 2026

Plenary Session

Plenary Presentations

Room: Silver Pearl 1-3

Session Chairs: Mrityunjay Singh, Ohio Aerospace Institute;
Tatsuki Ohji, Yokohama Kokuritsu Daigaku

8:30 AM

Opening remarks and Christina Back Introduction

8:45 AM

(PLEN-001-2026) Modernizing nuclear power with ceramic matrix composites (Invited)

C. A. Back*¹

1. General Atomics Electromagnetic Systems Group, USA

9:25 AM

Yutaka Kagawa Introduction

9:30 AM

(PLEN-002-2026) Advances in research and development of ceramic matrix composites: Current Japanese scenario (Invited)

Y. Kagawa*¹

1. Tokyo University of Technology, Katayanagi Laboratory, Japan

10:10 AM

Break

10:30 AM

Ji Yeon Park Introduction

10:35 AM

(PLEN-003-2026) Progress in the development of SiC CMC composites for extreme environments in Korea (Invited)

J. Park*¹

1. Sewon Hardfacing Co. Ltd., Republic of Korea

11:15 AM

Alexander Michaelis Introduction

11:20 AM

(PLEN-004-2026) Advanced ceramics for stationary storage and CCU (carbon capture and utilization) technology (Invited)

A. Michaelis*¹

1. Fraunhofer IKTS, Germany

GFMAT-3 Symposium 1- Powder Processing Innovation and Technologies for Advanced Materials and Sustainable Development

GFMATS1- Particle and powder design and synthesis

Room: Shorebreak 2

Session Chairs: Satoshi Tanaka, Nagaoka University of Technology;
Junichi Tatami, Yokohama National University

1:30 PM

(GFMAT-S1-001-2026) Design and Surface Characterization of Hollow Particles toward Functionalization (Invited)

C. Takai-Yamashita*^{1,2}

1. Nagoya Kogyo Daigaku, Japan
2. Tohoku Daigaku, IMRAM, Japan

2:00 PM

(GFMAT-S1-002-2026) Stimuli-Responsive Nanocarriers for Tumor Specific Accumulation (Invited)

S. Ilyas*¹; S. Mathur¹

1. University of Cologne, Institute of Inorganic and Materials Chemistry, Germany

2:30 PM

(GFMAT-S1-003-2026) From high purity alumina to fully dense ceramics

J. Fourcade*¹; A. Vivet¹; J. Otto¹

1. Baikowski SAS, France

2:50 PM

Break

3:10 PM

(GFMAT-S1-004-2026) Ag⁺ Superionic Conductors Derived from Silver Iodide and Silver Oxyacid Salts

Y. Matsushima*¹; R. Kawanago¹; K. Uchida¹; M. Yamamoto¹; C. Matsushita¹; N. Oishi¹; S. Yin²

1. Yamagata University, Applied Chemistry, Chemical Engineering, and Biochemical Engineering, Japan
2. IMRAM, Tohoku University, Japan

3:30 PM

(GFMAT-S1-005-2026) Intercalation-Assisted Massive Phase Transformation

P. Gouma*¹

1. The Ohio State University, MSE, USA

GFMAT-3 Symposium 4- Crystalline Materials for Semiconductor, Optical/Scintillator and Dielectric Applications

GFMATS4- Phosphor and sensor

Room: Sandpiper C

Session Chairs: Kevin Anderson, U.S. Naval Research Laboratory;
Tetsuo Tsuchiya, National Institute of Advanced Industrial Science and Technology (AIST)

1:30 PM

(GFMAT-S4-001-2026) Flexible Sensor Development Using Phosphor Films with Photo-MOD (Invited)

J. Nomoto¹; Y. Uzawa¹; T. Tsuchiya*¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Japan

2:00 PM

(GFMAT-S4-002-2026) Design of Long-Wavelength Emitting LED Phosphors (Invited)

K. Toda*¹

1. Niigata University, Japan

2:30 PM

(GFMAT-S4-003-2026) Sol-gel composite materials for high temperature ultrasonic sensor applications (Invited)

M. Kobayashi*¹

1. Kumamoto Daigaku, Japan

3:00 PM

Break

3:20 PM

(GFMAT-S4-004-2026) Synthesis of Phosphor Materials by the Water-Assisted Solid-State Reaction (Invited)

K. Toda*¹

1. Niigata University, Japan

3:50 PM

(GFMAT-S4-005-2026) Development of hybrid gas sensors using low-dimensional carbon nanomaterials and oxide ceramic nanostructures with MOD method (Invited)

T. Sugahara*¹

1. Kyoto Institute of technology, Faculty of Materials Science and Engineering, Japan

4:20 PM**(GFMAT-S4-006-2026) Synthesis of Silicate Phosphors Using a Novel Solid-Gas Hybrid Technology (Invited)**K. Toda^{*1}; W. Hikita¹

1. Niigata University, Japan

4:50 PM**(GFMAT-S4-007-2026) Bottom-up design and fabrication of thermoelectric nanomaterials (Invited)**K. Anderson^{*1}; B. L. Greenberg¹; A. G. Jacobs¹; J. Wollmershauser¹; B. N. Feigelson¹

1. US Naval Research Laboratory, USA

5:20 PM**PPP- Dielectric and magnetic properties of the FE-Y2DyFe5O12 ceramic composites****5:22 PM****PPP- Technology and properties of multi-component multiferroic ceramic composites PMN-PT-PS-Ferrite****5:24 PM****PPP- Influence of rare-earth elements on the functional properties of BZT-BCT ceramics****5:26 PM****PPP- Synthesis, microstructural evolution and dielectric properties of BLT ceramics modified with a special glass admixture****GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications****GFMAT-S6- Li-ion batteries- Electrode Materials I**

Room: Tidepool 1

Session Chairs: Naoaki Yabuuchi, Yokohama National University; Mickael Dollé, Université de Montreal

1:30 PM**(GFMAT-S6-001-2026) Toward high-energy-density and safe lithium-ion secondary batteries (Invited)**S. Seo^{*1}

1. Semiconductor Energy Laboratory Co. Ltd, Japan

2:05 PM**(GFMAT-S6-002-2026) Surface-Enhanced Nickel-Rich Layered Cathodes by Cation-Disordered Rocksalt (Invited)**J. Kim^{*1}

1. Stevens Institute of Technology, Chemical Engineering & Materials Science, USA

2:35 PM**(GFMAT-S6-003-2026) Impact of fluorination on the structure and electrochemistry of Mn-rich disordered rocksalt cathodes**Q. Deville¹; F. Weill¹; B. Mortemard de Boisse²; M. Guignard¹; D. Carlier^{*1}

1. Institut de Chimie de la Matière Condensée de Bordeaux, France
2. SAFT, France

2:55 PM**Break****3:20 PM****(GFMAT-S6-004-2026) The Earth-abundant Cathode Active Materials (EaCAM) consortium: Advancing manganese-rich oxides toward practical Application (Invited)**J. R. Croy^{*1}

1. Argonne National Laboratory, USA

3:50 PM**(GFMAT-S6-005-2026) Calcination process design for layered oxide cathodes toward sustainable lithium ion battery (Invited)**H. Park^{*1}

1. Korea University, Department of Materials Science and Engineering, Republic of Korea

4:20 PM**(GFMAT-S6-006-2026) Metastable lithium-rich layered oxides for an enhanced structural stability (Invited)**M. Guignard^{*1}; G. Zhao¹; L. Castro²; P. Salles¹; S. Belin¹; D. Carlier¹; C. Delmas¹

1. ICMCB-CNRS, France
2. Toyota Motor Europe NV SA, Belgium
3. ESRF, France
4. Synchrotron SOLEIL, France

HTCMC-12/GFMAT-3 Joint Symposium- Additive Manufacturing Technologies and Applications**HTCMC -GFMAT- Joint Sym- Applications I**

Room: Sandpiper B

Session Chair: Soshu Kiriara, Osaka University

1:30 PM**(Joint Sym-001-2026) Improvement in packing density of green body via binder jetting using binary powder mixing (Invited)**A. Shimamura^{*1}; Y. Chung²; N. Kondo²

1. National Institute of Advanced Industrial Science and Technology (AIST), Japan
2. Sangyo Gijutsu Sogo Kenkyujo Chubu Center, Japan

2:00 PM**(Joint Sym-002-2026) Fused filament fabrication of alumina and zirconia ceramics: Influence of infill architecture on microstructure and flexural strength**M. Ranaiefar^{*1}; M. Singh¹; M. C. Halbig¹

1. NASA Glenn Research Center, USA
2. Ohio Aerospace Institute, USA

2:20 PM**(Joint Sym-003-2026) Micro-architected metamaterial composites by parametric optimization and additive manufacturing**M. Du¹; C. Zheng¹; H. Deng¹; J. Tsai¹; R. R. Kamath¹; P. S. Chaugule¹; C. A. Chuang¹; D. Singh^{*1}; M. C. Messner¹

1. Argonne National Laboratory, USA

HTCMC-GFMAT- Joint Sym- Applications II

Room: Sandpiper B

Session Chair: Farid Akhtar, Lulea University of Technology

2:40 PM**(Joint Sym-004-2026) 3D printing technology for intelligent electronic medical devices (Invited)**S. Kang^{*1}

1. Seoul National University, Materials Science and Engineering, Republic of Korea

3:10 PM**Break****3:30 PM****(Joint Sym-005-2026) Stereolithographic additive manufacturing for fine materials components (Invited)**S. Kiriara^{*1}; F. Spirrett¹

1. Osaka University, Joining and Welding Research Institute, Japan

4:00 PM**(Joint Sym-006-2026) Digital light processing of silica/chitosan inorganic/organic hybrids with open porosity (Invited)**J. Jones^{*1}; H. Iqbal¹; K. Lee²

1. Imperial College London, Department of Materials, United Kingdom
2. Imperial College London, Department of Aeronautics, United Kingdom

4:30 PM

(Joint Sym-007-2026) Extrusion-based additive manufacturing of alumina foams and ammonia sorbents with tailored porosity and stability (Invited)

F. Akhtar*¹

1. Lulea University of Technology, Division of Materials Science, Sweden

HTCMC-12 Symposium 3- Polymer Derived Ceramics and Composites

HTCMCS3- Pre ceramic Polymers and Polymer-Derived Ceramics I

Room: Sandpiper A

Session Chairs: Matthew Dickerson, Air Force Research Laboratory; Jordan Zackasee, Air Force Research Laboratory

1:30 PM

Opening Remarks

1:40 PM

(HTCMC-S3-002-2026) Synthesis constituents and processing technologies for UHTCMCs (Invited)

T. Pruyne*¹; M. B. Dickerson¹; J. Delcamp¹

1. Air Force Research Laboratory, Materials and Manufacturing Directorate, USA

2:10 PM

(HTCMC-S3-003-2026) Laser-induced graphene from polymeric materials and its application to microwave absorption (Invited)

S. Lee*¹

1. Inha University, Mechanical Engineering, Republic of Korea

2:40 PM

(HTCMC-S3-004-2026) Architected ceramics from pre ceramic polymers: Powder bed fusion pathways to functional components (Invited)

A. Ortona*¹

1. SUPSI, MEMTI, Switzerland

HTCMCS3- Pre ceramic Polymers and Polymer-Derived Ceramics II

Room: Sandpiper A

Session Chairs: Matthew Dickerson, Air Force Research Laboratory; Gurpreet Singh, Kansas State University

3:10 PM

Break

3:30 PM

(HTCMC-S3-005-2026) Mechanical characterization of 3D-printed polymer-derived ceramic composites at ambient and elevated temperature (Invited)

B. G. Compton*^{1,2}

1. The University of Tennessee Knoxville Tickle College of Engineering, Mechanical and Aerospace Engineering, USA
2. The University of Tennessee Knoxville Tickle College of Engineering, Materials Science and Engineering, USA

4:00 PM

(HTCMC-S3-006-2026) Straightforward design of 3D polymer-derived silicon carbide parts via extrusion-based 3D printing technology (Invited)

S. Bernard*¹

1. CNRS, IRCER, France

4:30 PM

(HTCMC-S3-007-2026) Additive manufacturing of SiOC based monoliths as structured catalysts for CO₂ hydrogenation (Invited)

C. Salameh*¹

1. Institut Européen des Membranes, France

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites

HTCMCS4- Innovative design

Room: Silver Pearl 1-3

Session Chair: Katsumi Yoshida, Institute of Science Tokyo

1:30 PM

(HTCMC-S4-001-2026) Progress on the "Matrix-First" paradigm for fiber-reinforced ceramic matrix composites (Invited)

A. Ortona*¹

1. SUPSI, MEMTI, Switzerland

2:00 PM

(HTCMC-S4-002-2026) Development of LSled C/SiC Components for Scramjet Engines in Korea (Invited)

S. Kim*¹; I. Han¹; H. Bang¹; S. Kim¹; Y. Seong²; S. Lee¹

1. Korea Institute of Energy Research, Republic of Korea
2. Korea Institute of Energy Research(KIER), Energy Materials Laboratory, Republic of Korea

2:30 PM

(HTCMC-S4-003-2026) Innovative design and testing of SiC/SiC composites for fusion devices (Invited)

A. J. Leide*¹; D. Andrews¹; J. Wade-Zhu¹

1. UKAEA, Materials Division, United Kingdom

3:00 PM

Break

3:20 PM

(HTCMC-S4-004-2026) Optimized local reinforcement of C/C-SiC structures using Fiber Patch Placement (Invited)

J. Riesner*¹; D. Koch¹

1. Universitat Augsburg, Germany

3:50 PM

(HTCMC-S4-005-2026) Development of refractory high-entropy ceramic matrix composites through the integration of computational thermodynamics and experiments (Invited)

Y. Arai*¹; R. Inoue¹

1. Tokyo University of Science, Japan

4:20 PM

(HTCMC-S4-006-2026) Evaluation of mechanical and thermal properties of C/SiC using continuous composites CF3D technology

K. C. Bull*¹; J. Gilder²; C. L. Cramer²; D. Gilmer⁴

1. The University of Tennessee Knoxville Tickle College of Engineering, Mechanical and Aerospace Engineering, USA
2. The University of Tennessee Knoxville Tickle College of Engineering, Aerospace, USA
3. Oak Ridge National Lab, Manufacturing Science Division, USA
4. The University of Tennessee Knoxville Tickle College of Engineering, Materials Science and Engineering, USA

4:40 PM

(HTCMC-S4-007-2026) Laser powder bed fusion of ceramic-regolith composites for lunar-analog cylinder fabrication under inert conditions

M. Feehan*¹

1. Space Copy Inc., Canada

5:00 PM

(HTCMC-S4-008-2026) Effects of C-fiber tow counts on physical and mechanical behavior of the NITE-AXIOM SiC slurry Pre-preg sheets and their Laminate C/SiC Composites

H. Yun*¹; A. Stanley¹; W. Simpson²; E. Vargas³; A. L. Guevara⁴; K. Grijalva⁵; A. Garcia⁵

1. Axiom Materials Inc, USA
2. Axiom Materials Inc, Technical, USA
3. University of Southern California, Materials Science and Engineering, USA
4. Axiom Materials Inc, R&D, USA
5. Axiom Materials Inc, Sales, USA

5:20 PM

PPP- New alumina matrix for high performance oxide CMC

HTCMC-12 Symposium 7- Materials for Extreme Environments – UHTCs, MAX phases, and nanolaminates

HTCMC7- Entropy stabilized compositionally complex UHTCs and MAX phases I

Room: Osprey

Session Chair: Miladin Radovic, Texas A&M University

1:30 PM

(HTCMC-S7-001-2026) Phase stability of compositionally complex UHTC transition metal carbides (Invited)

T. Davey^{*1,2}; E. Zancan¹; Y. Chen²

1. Bangor University, Nuclear Futures Institute, United Kingdom
2. Tohoku University, Graduate School of Engineering, Japan

2:00 PM

(HTCMC-S7-002-2026) Single-phase high-entropy carbide and boride UHTCs enabled by data-driven composition selection

A. F. Ornelas¹; A. G. Castellanos^{*1}

1. The University of Texas at El Paso, Aerospace and Mechanical Engr. Dept., USA

2:20 PM

(HTCMC-S7-003-2026) Synthesis of zeta phase binary, mid-entropy, and high-entropy carbides exhibiting group IV and V metals

J. W. Wannenmacher^{*1}

1. Missouri University of Science and Technology, Materials Science Engineering, USA

2:40 PM

(HTCMC-S7-004-2026) Lamellar microstructure engineering in tantalum, vanadium and niobium carbides for enhanced ceramic ductility

M. Lakusta^{*1}; A. Emdadi¹; J. Watts¹; D. Lipke¹; G. Hilmas¹; J. Lonergan¹

1. Missouri University of Science & Technology, Materials Science and Engineering, USA

3:00 PM

Break

HTCMC7- Entropy stabilized compositionally complex UHTCs and MAX phases II

Room: Osprey

Session Chair: Antonio Vinci, CNR - ISSMC

3:20 PM

(HTCMC-S7-005-2026) Toughening transition metal carbides through high entropy zeta phase nano domains (Invited)

J. Lonergan^{*1}; M. Lakusta¹; A. Emdadi¹; J. Watts¹; D. Lipke¹; G. Hilmas¹

1. Missouri University of Science and Technology, Materials Science and Engineering, USA

3:50 PM

(HTCMC-S7-006-2026) Strategies for the controlled synthesis of compositionally complex MAX Phases (Invited)

M. Radovic^{*1}; M. Dujovic¹; C. Wang¹; Z. Tan¹; A. Srivastava¹

1. Texas A&M University, Materials Science and Engineering, USA

4:20 PM

(HTCMC-S7-007-2026) Microstructure and mechanical property correlation in high-entropy dual-phase (Ti,Zr,Ta,Hf) boride-carbide-based ultra-high-temperature ceramic

K. P. Singh^{*1}; K. Balani¹

1. Indian Institute of Technology Kanpur, Materials Science and Engineering, India

4:40 PM

(HTCMC-S7-009-2026) Development of Ultra-Hard UHTCS from MAX phases and boron carbide

W. Banas^{*1}; D. D. Kozien¹; L. Silvestroni²; S. Failla³; Z. Pedzich⁴

1. Akademia Gorniczo-Hutnicza im Stanislaw Staszica w Krakowie, Department of Ceramics and Refractories, Poland
2. Consiglio Nazionale delle Ricerche, ISSMC, Italy
3. National Research Council of Italy - Institute of Science, Technology and Sustainability for Ceramics, Department of Chemical Science and Materials Technologies (DSCTM), Italy
4. AGH University of Krakow, Department of Ceramics and Refractory Materials, Poland

HTCMC-12 Symposium 8- Testing and Evaluation of Ceramic Matrix Composites from Constituents and Coupons to Components, including EBCs

HTCMC8- Mechanical characterization of ceramics and composites, techniques and equipment I

Room: Pelican

Session Chairs: Jeff Vervlied, Free Forms Fiber; Ryo Inoue, The University of Tokyo

1:30 PM

(HTCMC-S8-001-2026) Comparison of all-oxide ceramic matrix composites (OCMC) using Nextel, Nitivy and Vulcan Shield Global fabrics (Invited)

W. Pritzkow^{*1}; V. Dosch¹; T. Oberhofer¹; K. Tushtev²; R. S. Almeida²; K. Rezwan³

1. Walter E.C. Pritzkow Spezialkeramik, Germany
2. University of Bremen, Advanced Ceramics Group, Germany
3. University of Bremen, Germany

2:00 PM

(HTCMC-S8-002-2026) Mode I interlaminar fracture behavior of ceramic composites at ultra-high temperature (Invited)

G. Jefferson^{*1}; C. Popelar²; J. Pierce³; T. Jackson³

1. Air Force Research Laboratory, RXNC, USA
2. Southwest Research Institute, USA
3. University of Dayton, Research Institute, USA

2:30 PM

(HTCMC-S8-003-2026) Flexural strength of reinforced V shaped oxide/oxide composite specimen (Invited)

F. Guillet^{*1}; R. Garcez¹; A. Portal¹; F. Laurin²

1. Commissariat a l'energie atomique et aux energies alternatives Siege administratif, France
2. ONERA, DMAS, France

3:00 PM

Break

3:20 PM

(HTCMC-S8-004-2026) Enhanced deformability of off-stoichiometric TiC in Mo-Ti-C ternary composites (Invited)

S. Ida^{*1}; E. Nakagawa²; V. Paul³; F. Tropper³; T. Ohmura³; K. Yoshimi²; T. Kimura¹

1. Japan Fine Ceramics Center, Japan
2. Tohoku University, Japan
3. National Institute for Materials Science, Japan

3:50 PM

(HTCMC-S8-005-2026) High temperature digital image correlation for strain measurement of ceramic matrix composites

J. Shaw^{*1}; M. Mordasky²; D. Collins²

1. Pratt & Whitney, USA
2. Raytheon Technologies Research Center, USA

4:10 PM

(HTCMC-S8-006-2026) Direct measurement of interlaminar tensile strength in CMCs at elevated temperatures using the Flex ILT method

Y. Zhou^{*1}; K. Maxwell¹; G. Gemeinhardt¹

1. GE Aerospace, USA

4:30 PM**(HTCMC-S8-007-2026) Condition assessment of SiC_f/SiC CMC via resonance testing techniques**Z. Quiney*¹; J. Stephen¹; G. Garcia Luna¹; A. L. Chamberlain²; S. Jeffs³

1. Swansea University, Institute of Structural Materials, United Kingdom
2. Rolls-Royce North America Inc, USA
3. Swansea University, United Kingdom
4. Rolls-Royce plc, United Kingdom

4:50 PM**(HTCMC-S8-008-2026) Mechanical characterisation of unidirectional oxide/oxide ceramic matrix composite laminate**A. Garnier*^{1,2}; C. Bouvet¹; C. Morel¹; T. Cutard¹; G. Dusserre¹; J. Malenfant²

1. Institut Clement Ader, France
2. Safran Ceramics, France

5:10 PM**(HTCMC-S8-009-2026) Tensile behavior and thermal analysis of an orthogonal 3D woven SiC-fiber/SiC composite under rapid temperature gradient heating**Y. Matsuda*^{1,2}; N. Sugawara¹; T. Ogasawara¹; R. Inoue²; T. Aoki¹; H. Sato³; Y. Kitamura³

1. Tokyo Noko Daigaku, Japan
2. Tokyo Rika Daigaku, Japan
3. Kabushiki Kaisha IHI, Japan
4. Uchu Koku Kenkyu Kaihatsu Kiko, Japan

HTCMC-12 Symposium 10- CMC Applications I – Aerospace Propulsion and Structures**HTCMCS10- Processing and Properties of CMCs for Aerospace Applications I**

Room: Shorebreak 1

Session Chair: Christopher Hawkins, Dstl

1:30 PM**(HTCMC-S10-001-2026) High-temperature characterization of CMCs in inert and oxidizing atmospheres (Invited)**M. Valle*¹; L. Delledonne¹; C. Gigante¹; L. Malucelli¹; A. Monzillo¹

1. Petroceramics S.p.A., Italy

2:00 PM**(HTCMC-S10-002-2026) Current Tyranno Fiber® (SiC Fiber) developed by UBE Corporation and its applications (Invited)**T. Matsunaga*¹

1. UBE Corporation, Specialty Products Division, Japan

2:30 PM**(HTCMC-S10-003-2026) Damage-tolerant design for impact resistant ceramic matrix composites**A. Caporale*¹; G. J. Janszen¹; M. Ursic²; R. Passoni²; A. Airolidi¹

1. Politecnico di Milano, Dept. of Aerospace Science and Technology, Italy
2. Brembo NV, Italy

2:50 PM**Break****3:10 PM****(HTCMC-S10-004-2026) Hafnium-based ceramic nano composites: Near-zero ablation for hybrid rocket applications (Invited)**S. Lee*¹; V. Nguyen¹

1. Korea Institute of Materials Science, Republic of Korea

3:40 PM**(HTCMC-S10-005-2026) Advanced manufacturing and densification techniques for fabricating ceramic matrix composites (Invited)**D. Mitchell*¹

1. University of Central Florida, Materials Science and Engineering, USA

4:10 PM**(HTCMC-S10-006-2026) Polymeric ZrC precursors for ultrahigh-temperature ceramic matrix composites (Invited)**J. Hepp¹; J. Williams¹; I. Ivanov*¹; C. Deck¹; H. Khalifa¹

1. General Atomics Electromagnetic Systems Group, Nuclear Technologies and Materials (NTM), USA

4:40 PM**(HTCMC-S10-007-2026) SiC-based matrix densification and high-temperature mechanical properties with solid-state synthesized additives for CMC: Boron and titanium**M. Park*¹; S. Jung¹; W. Kwon¹; W. Choi¹; S. Lee¹

1. Korea Institute of Materials Science, Extreme Materials Research Institute, Republic of Korea

HTCMC-12 Symposium 11- CMC Applications II – Solar, Nuclear and Propulsion Systems**HTCMCS11- Coatings, integration, joining and machining**

Room: Sandpiper D

Session Chair: John Holowczak, RTX Corporation

1:30 PM**(HTCMC-S11-001-2026) Development and assessment of SiC/SiC composite joints for containers in concentrated solar power systems (Invited)**V. Casalegno*¹; C. Malinverni¹; M. Salvo²

1. Politecnico di Torino, DISAT, Italy
2. Politecnico di Torino, Italy

2:00 PM**(HTCMC-S11-002-2026) The Joining and Fabrication of thin-walled ceramic composites with Embedded Wire Chemical Vapor Deposition**S. P. Shuster*¹

1. Free Form Fibers, USA

2:20 PM**(HTCMC-S11-003-2026) Design and manufacture of SiC/SiC joints by embedded wire chemical vapor deposition**B. W. Lamm*²; J. Pegna¹; E. Cakmak²; W. Zhong²; T. Koyanagi²

1. Free Form Fibers, USA
2. Oak Ridge National Laboratory, Materials Science and Technology Division, USA

2:40 PM**(HTCMC-S11-004-2026) Laser assisted joining of SiC/SiC for high temperature applications**M. Ferraris*^{1,2}; K. Pandey^{1,2}; A. Benelli^{1,2}; M. De Maddis^{3,2}

1. Politecnico di Torino, Department of Applied Science and Technology, Italy
2. J-Tech@PoliTO, Italy
3. Politecnico di Torino, DIGEP, Italy

3:00 PM**Break****HTCMCS11- CMC for energy systems**

Room: Sandpiper D

Session Chair: Valentina Casalegno, Politecnico di Torino

3:20 PM**(HTCMC-S11-005-2026) Reflections on 40 Years of Structural Ceramics and CMCs for Nuclear, Turbine, and Heat Exchanger Applications (Invited)**J. E. Holowczak*¹

1. RTX Corporation, Research Center, USA

3:50 PM**(HTCMC-S11-006-2026) Ceramic Heat Exchanger for Solar Industrial Process Heat* (Invited)**D. Singh*¹

1. Argonne National Lab, USA

4:20 PM**(HTCMC-S11-007-2026) Microscopic mechanical properties of Si₃N₄-based ceramics (Invited)**J. Tatami*¹

1. Yokohama National University, Faculty of Environmental and Information Sciences, Japan

Tuesday, June 2, 2026**GFMAT-3 Symposium 1- Powder Processing Innovation and Technologies for Advanced Materials and Sustainable Development****GFMATS1- Advanced characterization and analytical techniques for powder processing and materials**

Room: Shorebreak 2

Session Chairs: Shaista Ilyas, Institute of Inorganic and Materials Chemistry; Chika Takai, Nagoya Institute of Technology

8:40 AM**(GFMAT-S1-006-2026) Sequential 3D characterization for structure understanding and defect control in alumina manufacturing (Invited)**S. Tanaka*¹

1. Nagaoka Gijutsu Kagaku Daigaku, Japan

9:10 AM**(GFMAT-S1-007-2026) Geopolymerization of lunar and martian regolith simulants for space sustainability (Invited)**L. Santo*¹; A. Proietti¹; F. Quadri¹

1. Università degli Studi di Roma Tor Vergata, Italy

9:40 AM**(GFMAT-S1-009-2026) Rheology and microstructural dynamics in ceramic processing (Invited)**T. Okazaki*¹

1. Sangyo Gijutsu Sogo Kenkyujo Tsukuba Chuo Jigyosho, Japan

10:10 AM**Break****10:30 AM****(GFMAT-S1-010-2026) Isotropic graphite manufacturing process and product introduction (Invited)**H. Shirakawa*¹

1. Toyo Tanso Kabushiki Kaisha, Japan

11:00 AM**(GFMAT-S1-011-2026) Internal structure evolution of silica slurry during drying observed by OCT - Influence of molecular weight of PEI used as dispersant-**J. Tatami*¹; H. Kuroda¹; M. Iijima²; T. Takahashi³

1. Yokohama National University, Japan
2. Yokohama National University, Graduate School of Environment and Information Sciences, Japan
3. Kanagawa Institute of Industrial Science and Technology, Japan

11:20 AM**(GFMAT-S1-012-2026) Freezing behavior and spray freeze granulation drying of non-aqueous silicon nitride slurries with varying PEI molecular weights and OA contents**R. Yamazaki*¹; J. Tatami²; M. Iijima³; S. Kawaguchi⁴; N. Kondo⁵

1. Yokohama Kokuritsu Daigaku, Graduate School of Environment and Information Sciences, Japan
2. Yokohama National University, Japan
3. Yokohama National University, Graduate School of Environment and Information Sciences, Japan
4. PRECI Co., Ltd., Japan
5. Kokuritsu Kenkyu Kaihatsu Hojin Sangyo Gijutsu Sogo Kenkyujo, Japan

GFMAT-3 Symposium 4- Crystalline Materials for Semiconductor, Optical/Scintillator and Dielectric Applications**GFMATS4- Electronic material**

Room: Sandpiper C

Session Chairs: James K C, University of Hyderabad; Kozo Fujiwara, Tohoku Daigaku

8:30 AM**(GFMAT-S4-008-2026) In-situ observation of solid-liquid interface phenomena in semiconductor materials (Invited)**K. Fujiwara*¹

1. Tohoku Daigaku, Institute for Materials Research, Japan

9:00 AM**(GFMAT-S4-009-2026) Interfacial control and device structures of van der Waals semiconductors on ferroelectric HfZrOx insulator toward flexible electronics (Invited)**N. Hiroshiba*¹; K. Koike¹

1. Osaka Kogyo Daigaku, Japan

9:30 AM**(GFMAT-S4-010-2026) A process to make crystalline oxide ferroelectrics compatible with polymer or si substrates using expanded laser beam (Invited)**J. R. K C*¹; A. TS¹

1. University of Hyderabad, CASEST, School of Physics, India

10:00 AM**Break****10:20 AM****(GFMAT-S4-011-2026) Electrical properties of alkaline-earth hexaboride thin films doped with lithium**A. Hiraies*¹; V. R. Vasquez²; O. A. Graeve¹

1. University of California San Diego, USA
2. University of Nevada Reno, USA

GFMATS4- Transparent ceramic

Room: Sandpiper C

Session Chairs: Matthias Müller, Radiation Monitoring Devices Inc; Nobuya Hiroshiba, Osaka Kogyo Daigaku

10:40 AM**(GFMAT-S4-013-2026) Surface initiated densification of MgAl₂O₄ spinel driven by Ca concentration gradient (Invited)**H. Kim¹; S. Cheon¹; Y. Park*¹; J. Ko¹; J. Lee¹

1. Korea Institute of Materials Science, Republic of Korea

11:10 AM**(GFMAT-S4-014-2026) Optical and laser properties of sapphire/YAG bonding materials by pulsed electric current sintering (Invited)**H. Furuse*¹; H. Uehara²; R. Yasuhara²

1. National Institute for Materials Science (NIMS), Japan
2. National Institute for Fusion Science, Japan

11:40 AM

(GFMAT-S4-019-2026) Laser purification and processing of quartz silica sandS. Risbud*¹; A. Naim¹

1. University of California, USA

GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications**GFMAT-S6- Battery Electrolyte and Interface Design**

Room: Tidepool 1

Session Chairs: Dong-Hwa Seo, Korea Advanced Institute of Science and Engineering (KAIST); Yuki Oriyasa, Ritsumeikan University

8:30 AM

(GFMAT-S6-008-2026) Unlocking the potential of non-aqueous battery electrolytes beyond conventional constraints (Invited)I. Cekic-Laskovic*¹

1. Forschungszentrum Julich GmbH, Helmholtz Institute Münster, Germany

9:00 AM

(GFMAT-S6-009-2026) Rational solvent design for advanced lithium-ion batteries (Invited)Y. Yamada*¹

1. The University of Osaka, SANKEN, Japan

9:30 AM

(GFMAT-S6-010-2026) Renovating electrolytes for fast-charging and high-energy Li-ion batteries (Invited)H. Lee*¹

1. Yonsei University, Republic of Korea

10:00 AM

Break

10:20 AM

(GFMAT-S6-011-2026) Interfacial reaction mechanisms governing battery kinetics and degradation (Invited)Y. Oriyasa*¹; Y. Goto¹; T. Hamada¹; Y. Miyaura¹; Y. Shiomi¹

1. Ritsumeikan University, Department of Applied Chemistry, Japan

10:50 AM

(GFMAT-S6-012-2026) Three-dimensional mesoporous graphene for energy applications (Invited)H. Nishihara*¹

1. Tohoku Daigaku, Japan

11:20 AM

(GFMAT-S6-013-2026) Development of high performance Li-S batteries via the usage of scalable electrocatalysts (Invited)A. J. Bhattacharyya*¹

1. Indian Institute of Science, Interdisciplinary Centre for Energy Research, India

11:50 AM

(GFMAT-S6-035-2026) Borate-Based Electrolytes Enabling Sustainable Sodium Batteries (Invited)C. Ban*¹

1. University of Colorado, Boulder, Mechanical Engineering, USA

HTCMC-12/GFMAT-3 Joint Symposium- Additive Manufacturing Technologies and Applications**HTCMC-GFMAT- Joint Sym- Applications III**

Room: Sandpiper B

Session Chair: Hae-Jin Choi

8:30 AM

(Joint Sym-008-2026) Challenges and opportunities of ceramic additive manufacturing (Invited)A. Michaelis*¹

1. Fraunhofer IKTS, Germany

9:00 AM

(Joint Sym-009-2026) Multimaterial and composite printing: Ongoing efforts at Lawrence Livermore National Laboratory (Invited)J. Schwartz*¹

1. Lawrence Livermore National Laboratory, Materials Science Division, USA

HTCMC -GFMAT- Joint Sym- Stereolithography

Room: Sandpiper B

Session Chair: Johanna Schwartz, Lawrence Livermore National Laboratory

9:30 AM

(Joint Sym-010-2026) Maturing ceramic additive manufacturing: Process-Structure-Property relationships in Vat photopolymerization (Invited)K. Lee*¹

1. Los Alamos National Laboratory, USA

10:00 AM

Break

10:20 AM

(Joint Sym-011-2026) Eliminating prolonged debinding in vat photopolymerization of ceramic materials: A photocurable suspension design approach (Invited)M. Iijima*¹; Y. Yamanoi¹; F. Yokomori¹; J. Tatami¹

1. Yokohama National University, Japan

10:50 AM

(Joint Sym-012-2026) Studies and characterization of 3D printed ceramic electrolytes for batteriesM. Faral*¹; A. Laventure¹; M. Dollé¹

1. University of Montreal, Chemistry, Canada

11:10 AM

(Joint Sym-013-2026) Optimized DLP-based 3D printing of porous ceramics and data-driven process modelingI. Kim*¹; H. Yun^{1,2}

1. Korea Institute of Materials Science, Republic of Korea

2. University of Science and Technology, Republic of Korea

11:30 AM

(Joint Sym-014-2026) Preparation of a photocationic siloxane oligomer-Based hybrid binder for photopolymerization-based ceramic 3D printingH. Park*¹; S. Sakuragi²; S. Yang²; Y. Sohn¹

1. University of Central Florida College of Engineering and Computer Science, USA

2. Changwon National University, Republic of Korea

11:50 AM**(Joint Sym-018-2026) Analysis of mixing parameters on rheology and polymer stability in aqueous silicon carbide slurries**J. Feldbauer^{*1,2}; C. L. Cramer²; T. Aquirre²; B. L. Armstrong³; R. Walker²; P. Snarr⁴; D. Gilmer²

1. The University of Tennessee Knoxville Tickle College of Engineering, USA
2. Oak Ridge National Lab, Manufacturing Science Division, USA
3. Oak Ridge National Lab, Material Science & Technology, USA
4. The University of Texas at Austin, USA, USA
5. The University of Tennessee Knoxville Tickle College of Engineering, Material Science and Engineering, USA

HTCMC-12 Symposium 3- Polymer Derived Ceramics and Composites**HTCMCS3- Preceramic Polymers and Polymer-Derived Ceramics III**

Room: Sandpiper A

Session Chair: Matthew Dickerson, Air Force Research Laboratory

8:30 AM**(HTCMC-S3-009-2026) Preparation and characterization of ceramic composites from hafnium and silicon oxycarbide hybrid precursor**A. Roy^{*1}; G. Singh²

1. Kansas State University, Mechanical and Nuclear Engineering, USA
2. Kansas State University Carl R Rice College of Engineering, USA

8:50 AM**(HTCMC-S3-010-2026) Developing ceramic materials via preceramic polymer chemistry and a thorough understanding of structure-property relationships at the atomic scale (Invited)**N. Bedford^{*1}

1. Idaho National Laboratory, USA

9:20 AM**(HTCMC-S3-011-2026) Polymer-derived TiC/SiC ceramics: Microstructural evolution and property enhancement (Invited)**K. Lu^{*1}; M. Bidabadi¹; S. Nemani¹

1. University of Alabama at Birmingham, USA

HTCMCS3- Preceramic Polymers and Polymer-Derived Ceramics IV

Room: Sandpiper A

Session Chairs: Matthew Dickerson, Air Force Research Laboratory; James Ponder, Air Force Research Lab

9:50 AM**Break****10:10 AM****(HTCMC-S3-012-2026) From preceramic polymers to hBN 2D materials**C. Maestre¹; C. Journet¹; P. Steyer²; V. Garnier²; B. Toury^{*1}

1. Université Claude Bernard Lyon 1, Laboratoire des Multimatiériaux et Interfaces, France
2. Matériaux Ingénierie et Science, France

10:30 AM**(HTCMC-S3-013-2026) Maximizing ceramic yields of polymer grafted nanoparticle via modification of polymer architecture and nanoparticle composition**J. Zackasee^{*1}; A. Advincula¹; J. Ponder¹; J. Delcamp¹; T. Pruy¹; M. B. Dickerson¹

1. Air Force Research Laboratory, USA

10:50 AM**(HTCMC-S3-014-2026) Metal nitride syntheses for dummies (Invited)**Z. Yi¹; M. Aekka¹; K. Osada¹; J. Heron²; R. M. Laine^{*1}

1. University of Michigan, Materials Science and Engineering, USA
2. University of Michigan, USA

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites**HTCMCS4- Advanced processing and manufacturing technologies I**

Room: Silver Pearl 1-3

Session Chairs: Alberto Ortona, SUPSI; Daejong Kim, Korea Atomic Energy Research Institute

8:30 AM**(HTCMC-S4-009-2026) Comprehensive development of sustainable ceramic matrix composites (Invited) ~~WITHDRAWN~~**D. Koch^{*1}; A. Thorenz¹; D. Schüppel¹; F. Halter¹; L. Wietschel¹; A. Schneller¹

1. University of Augsburg, Institute for Materials Resource Management, Germany

9:00 AM**(HTCMC-S4-010-2026) Agile CMC fabrication through continuous fiber 3D printing and on-head matrix impregnation (Invited)**D. King^{*1}; D. Seymour¹; B. Hill¹; D. Young¹; B. Garcia¹

1. Weber State University, Miller Advanced Research and Solutions Center, USA

9:30 AM**(HTCMC-S4-011-2026) Fluidized bed chemical vapor deposition – A versatile technique for the preparation of ceramic composites (Invited)**A. El Mansouri¹; T. Da Calva¹; A. Guette¹; N. Bertrand¹; G. Chollon¹; H. Plaisantin¹; S. Couthures¹; G. L. Vignoles^{*1}

1. University Bordeaux, LCTS - Lab for ThermStructural Composites, France

10:00 AM**Break****10:20 AM****(HTCMC-S4-012-2026) AI image diagnosis of damage cracks in ceramic matrix composites**M. Kotani^{*3}; M. Yagai²; Y. Tanaka¹; Y. Kagawa¹

1. Tokyo University of Technology, Japan
2. Research Institute of Systems Planning, Inc., Japan
3. Japan Aerospace Exploration Agency, Japan

10:50 AM**(HTCMC-S4-013-2026) Application of pulsed DC electrophoretic deposition process to interphase formation for SiC_f/SiC composites (Invited)**K. Yoshida^{*1}; D. Sakakibara¹; A. Gubarevich¹; M. Kotani²

1. Institute of Science Tokyo, Japan
2. Japan Aerospace Exploration Agency (JAXA), Japan

11:20 AM**(HTCMC-S4-014-2026) Advances in the processing of ceramic matrix composites (CMCs) by polymer infiltration and pyrolysis (PIP)**M. B. Dickerson^{*1}; Z. D. Apostolov¹; L. M. Rueschhoff¹; M. Cinibulk¹; J. Delcamp¹; C. Kassner¹; T. Pruy¹

1. Air Force Research Laboratory, USA

11:40 AM**(HTCMC-S4-015-2026) The influence of key processing parameters on porosity in CMCs fabricated using CVI**O. Brandt^{*1}; R. Steadman²; V. Venkatachalam²; T. Shoulders²; L. Backman¹; J. Binner⁴

1. US Naval Research Laboratory, Spacecraft Engineering Division, USA
2. University of Birmingham, Metallurgy and Materials, United Kingdom
3. Technology Assessment and Transfer Inc, USA
4. University of Birmingham, Ceramic Science & Engineering, United Kingdom

HTCMC-12 Symposium 7- Materials for Extreme Environments – UHTCs, MAX phases, and nanolaminates

HTCMCS7- Novel processing methods for bulk, coatings, thin films, fibers, and/or composites

Room: Osprey

Session Chair: Diletta Scitti, CNR-ISSMC

8:30 AM

(HTCMC-S7-010-2026) Enhanced high temperature protective performance of hybrid composite fibers (Invited)

S. Moon^{*1}; S. Yun¹; W. Kim²

1. Korea Institute of Science and Technology, Republic of Korea
2. Korea Institute of Ceramic Engineering and Technology, Aerospace&Defense R&D Group, Republic of Korea

9:00 AM

(HTCMC-S7-012-2026) A novel processing route for near-net-shape Cf-ZrB₂ CMCs using 3D-printed fiber preforms

J. Park^{*1,2}; H. Choi¹; S. Lee¹

1. Korea Institute of Materials Science, Extreme Materials Institute, Republic of Korea
2. Pusan National University, Republic of Korea

9:20 AM

(HTCMC-S7-013-2026) Kinetic study and reaction mechanisms of C/ZrC composite in molten chloride salt

A. El Melhoufi^{*1}; L. Maillé¹; J. Braun^{1,2}; F. Rebillat¹

1. University of Bordeaux - Laboratory for Thermostructural Composites (LCTS), UMR 5801, France
2. CEA, France

HTCMCS7- Processing-microstructure-property relationships of UHTCMCs

Room: Osprey

Session Chair: Jason Lonergan, Missouri University of Science and Technology

9:40 AM

(HTCMC-S7-014-2026) Recent advances on ceramic matrix composites obtained by sintering (Invited)

A. Vinci^{*1}; L. Zoli¹; M. Mor¹; D. Sciti¹

1. CNR - ISSMC, Italy

10:10 AM

Break

10:30 AM

(HTCMC-S7-015-2026) Investigation and modelling of the mechanical response of UHTCMC materials (Invited)

A. Airolidi^{*1}; A. Caporale¹; L. Zoli²; P. Galizia²; A. Vinci²; R. Savino³; D. Sciti²

1. Politecnico di Milano, Dept. of Aerospace Science and Technology, Italy
2. CNR - ISSMC, Italy
3. Università degli Studi di Napoli Federico II, Italy

11:00 AM

(HTCMC-S7-016-2026) Effect of composition and fiber orientation on the thermal conductivity and emissivity of ultrahigh temperature ceramic matrix composites

E. S. Golightly^{*1}; H. B. Schonfeld¹; P. E. Hopkins²; D. Sciti³; A. Vinci³

1. University of Virginia, Mechanical and Aerospace Engineering, USA
2. University of Virginia, USA
3. CNR - ISSMC, Italy

HTCMC-12 Symposium 8- Testing and Evaluation of Ceramic Matrix Composites from Constituents and Coupons to Components, including EBCs

HTCMCS8- Mechanical characterization of ceramics and composites, techniques and equipment II

Room: Pelican

Session Chairs: Udayakumar Andi; Takuya Aoki, Japan Aerospace Exploration Agency

8:30 AM

(HTCMC-S8-010-2026) Real time X-ray tomography imaging of cracks initiation and propagation in CMCs above 1000°C (Invited)

D. Liu^{*1}

1. University of Oxford, Engineering Science, United Kingdom

9:00 AM

(HTCMC-S8-011-2026) Development of a fully articulated graphite flexure fixture for high temperature testing

W. M. Carty^{*1,2}; J. Castle¹; H. Lee¹

1. New York State College of Ceramics at Alfred University, Ceramic Engineering, USA
2. Materials Research Furnaces, LLC, Research & Development, USA

9:20 AM

(HTCMC-S8-012-2026) Damage detection in heat-resistant composites using synchrotron radiation CT and deep learning-based image segmentation

H. Taniguchi^{*1}; G. Okuma²; Y. Arai¹; T. Tsunoura³; H. Tsuruta³; H. Kakisawa²; R. Inoue¹

1. Tokyo Rika Daigaku, Japan
2. Busshitsu Zairyo Kenkyu Kiko, Japan
3. Kabushiki Kaisha IHI, Japan

9:40 AM

(HTCMC-S8-013-2026) Development of an experimental-numerical dialogue for the identification of a damage initiation threshold under combined loadings in a SiC/SiC CMC

V. Herbert^{*2}; F. Laurin²; T. Archer²; A. DeBarre²; T. Vandellos¹

1. SAFRAN Ceramics, France
2. DMAS, ONERA, Université Paris-Saclay, France

10:00 AM

Break

10:20 AM

(HTCMC-S8-031-2026) Radiation and h2 durable nuclear thermal propulsion fuel element mxene insulator (Invited)

J. H. Lalli^{*1}

1. NanoSonic, Inc., USA

10:50 AM

(HTCMC-S8-015-2026) Mechanical behavior of a sandwich structure based on carbon fibers geopolymer matrix composites

D. Habans^{*1}; P. Reynaud¹; É. Prud'homme¹; T. Cutard²; G. Dusserre²; G. Fantozzi¹; N. Godin¹

1. Institut National des Sciences Appliquées de Lyon, MATEIS, CNRS UMR5510, France
2. Ecole Nationale Supérieure des Mines d'Albi-Carmaux, ICA, CNRS UMR5312, France

11:10 AM

(HTCMC-S8-016-2026) Ablation behavior of C_f/ZrB₂-SiC CMCs fabricated with high concentration slurry using an HVOF torch

J. Lee^{*1}; Y. Zou¹; S. Lee¹

1. Korea Institute of Materials Science, Extreme Materials Institute, Republic of Korea

11:30 AM

(HTCMC-S8-017-2026) Test for rapid assessment of interface coating performance

B. Callaway^{*1}; J. Shaw¹

1. Pratt & Whitney, USA

11:50 AM**(HTCMC-S8-018-2026) Automated fiber push in measurements for fiber coating evaluation in CMCs**A. Badran^{*1}; E. Mailet¹; G. Zorn¹; Y. Zhou¹

1. GE Aerospace Research, USA

HTCMC-12 Symposium 10- CMC Applications I – Aerospace Propulsion and Structures**HTCMCS10- Processing and Properties of CMCs for Aerospace Applications II**

Room: Shorebreak 1

Session Chairs: Jon Binner, University of Birmingham; Marc Bouchez

8:30 AM**(HTCMC-S10-008-2026) Oxide ceramic matrix composites for aeronautical applications: Relationships between materials, processes, properties and thermomechanical behavior (Invited)**T. Cutard^{*1}

1. Ecole Nationale Supérieure des Mines d'Albi-Carmaux, Institut Clément Ader - UMR CNRS 5312, France

9:00 AM**(HTCMC-S10-009-2026) Advances in materials and processing for cost-effective, scalable Ox-Ox CMCs (Invited)**W. Simpson^{*1,2}; E. Vargas^{1,3}; K. Dincer²; M. G. Simpson⁴; S. Fast⁴; H. Yun¹

1. Axiom Materials Inc, Research and Development, USA
2. University of California Irvine, Material Science & Engineering, USA
3. University of Southern California, Materials Science and Engineering, USA
4. 3M Company, Advanced Materials, USA
5. Axiom Materials Inc, Process Engineering, USA

9:30 AM**(HTCMC-S10-010-2026) Angle-dependent erosion and microstructural damage in oxide-oxide ceramic matrix composites and polycrystalline nickel alloy**A. Wright⁴; K. Young³; V. Heng²; A. Ghoshal^{*1}

1. US Army Combat Capabilities Development Command Army Research Laboratory Aberdeen Proving Ground, USA
2. The Boeing Company Defense Space and Security Huntington Beach, USA
3. The Boeing Company, USA
4. SURVICE Engineering Company LLC, USA

9:50 AM**Break****HTCMCS10- Design and Testing of CMC Components for Aerospace Applications I**

Room: Shorebreak 1

Session Chairs: Richard Jones, Pratt & Whitney; Jared Weaver, GE Aerospace

10:10 AM**(HTCMC-S10-011-2026) An overview of CMC application development at IHI (Invited)**F. Watanabe^{*1}

1. Kabushiki Kaisha IHI, Japan

10:40 AM**(HTCMC-S10-012-2026) Development and industrial deployment of high-temperature CMC technologies in Korea (Invited)**H. Shin^{*2}; K. Kim²; D. Im¹

1. DACC Co Ltd, R&D Center, Republic of Korea
2. DACC Carbon Co., Ltd, Republic of Korea

11:10 AM**(HTCMC-S10-013-2026) CMCs for the aerospace market: Recent high-impact applications**L. Cavalli^{*1}; Y. Akram¹; M. Arnoldi¹; M. Boiocchi¹; M. Cantù¹; F. Giacometti¹

1. Petroceramics, Italy

11:30 AM**(HTCMC-S10-015-2026) Multidisciplinary approach to designing and validating CMC components, testing and simulation pyramid at SAFRAN (Invited)**S. Denneulin^{*1}

1. Safran SA, CERAMICS, France

HTCMC-12 Symposium 11- CMC Applications II – Solar, Nuclear and Propulsion Systems**HTCMCS11- UHTC CMC materials**

Room: Sandpiper D

Session Chair: Zbigniew Pedzich, AGH University of Krakow

8:30 AM**(HTCMC-S11-08-2026) Interface-engineered ceramic composites for extreme temperatures (Invited)**S. Ren^{*1}

1. University of Maryland, USA

9:00 AM**(HTCMC-S11-010-2026) Novel ultra-high temperature ceramic matrix composites for high temperature applications (Invited)**P. Tatarko^{*1}; H. Ünsal¹; S. sahin.ates@tubitak.gov.tr²; F. Valenza³; R. Kumar⁴; I. Dlouhy⁵

1. Institute of Inorganic Chemistry, Slovak Academy of Sciences, Department of Ceramics, Slovakia
2. Tubitak Marmara Arastirma Merkezi, Turkey
3. Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia Consiglio Nazionale delle Ricerche Sede di Genova, Italy
4. Indian Institute of Technology Madras, Metallurgical and Materials Engineering, India
5. Ustav fyziky materialu Akademie ved Ceske republiky, Czechia

HTCMCS11-Novel materials, processing, manufacturing, design, and qualification for energy applications

Room: Sandpiper D

Session Chair: Tatsuya Hinoki, Kyoto University

9:30 AM**(HTCMC-S11-027-2026) SiC as bulk ceramics for harsh environment applications (Invited)**P. Sajgalik^{*1}; O. Hanzel¹; M. Hicak¹; A. Kovalčíková¹

1. Institute of Inorganic Chemistry, Slovak Academy of Sciences, Ceramic Department, Slovakia

10:00 AM**Break****10:20 AM****(HTCMC-S11-011-2026) Reactive sintering of UHTC materials as a method for tailoring their composition and properties (Invited)**Z. Pedzich^{*1}; D. D. Kozien¹; W. Banas¹; A. Gubernat¹; A. Wojteczko¹; E. Durda²; C. Balazsi³

1. AGH University of Krakow, Department of Ceramics and Refractory Materials, Poland
2. AGH University of Krakow, Department of Physical Chemistry and Modelling, Poland
3. Centre for Energy Research, Centre of Excellence of Hungarian Academy of Sciences, Hungary

10:50 AM**(HTCMC-S11-012-2026) Environmental barrier coatings based on rare earth silicates (Invited)**J. Maier^{*1}; C. Eckardt¹; J. Vogt¹; A. Kenschak¹

1. Fraunhofer-Zentrum für Hochtemperatur-Leichtbau HTL, Germany

11:20 AM

(HTCMC-S11-013-2026) The influence on used FAST techniques on microstructure and phase composition of reactively sintered UHTC materials (Invited)D. D. Koziem^{*1}; W. Banas²; D. Salamon³; P. Tatarko⁴; M. Hicak⁵; O. Hanzel⁶; K. Pasiut¹; P. Nieroda⁷; Z. Pedzich⁸

1. Akademia Gorniczno-Hutnicza im Stanisława Staszica w Krakowie, Department of Ceramics and Refractory Materials, Poland
2. Akademia Gorniczno-Hutnicza im Stanisława Staszica w Krakowie, Department of Ceramics and Refractories, Poland
3. Central European Institute of Technology, Brno University of Technology, Czechia
4. Institute of Inorganic Chemistry, Slovak Academy of Sciences, Department of Ceramics, Slovakia
5. Ustav anorganickej chemie Slovenska akademia vied, Slovakia
6. AGH University of Krakow, Department of Ceramics and Refractory Materials, Poland
7. AGH University of Krakow, Department of Inorganic Chemistry, Poland

11:50 AM

(HTCMC-S11-014-2026) Enhancement in the joining sections of nuclear cladding materials through the use of embedded wire chemical vapor depositionS. P. Shuster^{*1}

1. Free Form Fibers, USA

GFMAT-3 Symposium 1- Powder Processing Innovation and Technologies for Advanced Materials and Sustainable Development**GFMATS1- Nanostructure and microstructure control**

Room: Shorebreak 2

Session Chairs: Loredana Santo, Universita degli Studi di Roma Tor Vergata; Takashi Shirai, Nagoya Institute of Technology

1:30 PM

(GFMAT-S1-013-2026) Sintering of transparent nanocrystalline tetragonal zirconia without stabilizers (Invited)M. Yoshida^{*1}

1. Gifu Daigaku, Japan

2:00 PM

(GFMAT-S1-014-2026) Refining of ATZ mechanical properties by reactive sintering process (Invited)Z. Pedzich^{*1}; M. Grabowy²; A. Kluczowska³; M. Gromada²; D. D. Koziem³; W. Banas³

1. AGH University of Krakow, Department of Ceramics and Refractory Materials, Poland
2. Institute of Power Engineering - Research Institute, Ceramics Division Cerel, Poland
3. Akademia Gorniczno-Hutnicza im Stanisława Staszica w Krakowie, Department of Ceramics and Refractory Materials, Poland

2:30 PM

(GFMAT-S1-015-2026) Improving dispersion of hollow silica nanoparticles in polymer composites via melt kneadingT. Ogiya^{*1}; K. Ishii¹; Y. Sato²; Y. Takagi³; M. Ishihara¹; M. Fuji¹

1. Nagoya Institute of Technology, Japan
2. Tokyo City University, Japan
3. Tokyo University of Science, Japan

2:50 PM

PPP- Reduced-order modeling of gas-solid flows with heat transfer via a frequency-based approach**GFMAT-3 Symposium 4- Crystalline Materials for Semiconductor, Optical/Scintillator and Dielectric Applications****GFMAT-S4- Scintillator**

Room: Sandpiper C

Session Chairs: Kenji Toda, Niigata University; Ha-Neul Kim, Korea Institute of Materials Science

1:30 PM

(GFMAT-S4-015-2026) Development of halide ceramics processing methodologies to achieve transparency requirements for optical applicationsT. Rudzik^{*1}; N. Cherepy²; S. A. Payne¹

1. Lawrence Livermore National Laboratory, USA
2. Lawrence Livermore National Lab, Chemistry and Materials Science, USA

1:50 PM

(GFMAT-S4-016-2026) Transparent ceramic scintillators fabricated into pixelated arrays via Direct-Ink-WriteA. Kostogiannes^{*1}; N. Cherepy¹; S. A. Payne¹

1. Lawrence Livermore National Laboratory, Materials Science Department, USA

2:10 PM

(GFMAT-S4-017-2026) Garnet ceramics for radiation detection (Invited)M. Müller^{*1}

1. Radiation Monitoring Devices Inc, Ceramics, USA

2:40 PM

(GFMAT-S4-018-2026) $Y_{1-x}Tb_xTaO_4$ single crystals as scintillators for X-ray detection (Invited)K. Shimamura^{*1}; E. G. Villora¹; Y. Zhou¹; D. Nakauchi²; T. Kato²; N. Kawaguchi²; T. Yanagida³

1. National Institute for Materials Science (NIMS), Japan
2. Nara Sentan Kagaku Gijutsu Daigakuin Daigaku, Japan
3. Nara Institute of Science and Technology, Japan

GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications**GFMATS6- Advanced Battery Materials**

Room: Tidepool 1

Session Chair: Dany Carlier, Institut de Chimie de la Matière Condensée de Bordeaux

1:30 PM

(GFMAT-S6-035-2026) Accelerating battery materials development with autonomous labs and AI: From disordered rocksalt cathodes to electrolytesD. Seo^{*1}

1. Korea Advanced Institute of Science and Engineering (KAIST), Daejeon, Republic of Korea

2:00 PM

(GFMAT-S6-015-2026) Safety assessment of lithium metal batteries: From reactive materials to advanced diagnostics (Invited)M. Bertrand¹; N. B. Johnson²; C. Saint-Antoine¹; M. Dollé^{*1}

1. Université de Montréal, Chemistry, Canada
2. Sandia National Laboratories, Power Sources R&D, USA

2:30 PM

(GFMAT-S6-016-2026) Defect-engineered and practical lithium insertion materials for Li storage applications (Invited)N. Yabuuchi^{*1}

1. Yokohama National University, Japan

3:00 PM

PPP- Electrochemical performance of Silicon oxy-carbide (SiOC) in ionic liquids (ILs) for high temperature adaptable Li-ion batteries

HTCMC-12/GFMAT-3 Joint Symposium- Additive Manufacturing Technologies and Applications

HTCMC-GFMAT- Joint Sym- Integration of Artificial Intelligence

Room: Sandpiper B

Session Chair: Motoyuki Iijima, Yokohama National University

1:30 PM

(Joint Sym-015-2026) Predicting composite material properties from images using a multi-input deep learning framework (Invited)

M. Kim¹; H. Choi^{*1}

1. Chung-Ang University, Mechanical Engineering, Republic of Korea

2:00 PM

(Joint Sym-016-2026) Industrialising ceramic AM with artificial intelligence and automation

A. Hovsepian^{*1,2}; E. Louradour¹; R. Gaignon¹

1. 3DCeram Sinto, 3DCeram Sinto, USA
2. Additive Plus, USA

2:20 PM

(Joint Sym-017-2026) A domain-specialized AI agent for photopolymer composite AM: Process and material recommendation, optimization, feedback control

S. Han^{*1}; L. Geonhwil¹; H. Choi¹

1. Chung-Ang University, Department of Mechanical Engineering, Republic of Korea

2:40 PM

(Joint Sym-018-2026) A review of Additive Manufacturing Technologies for designing polymer matrix composites (PMCs)

S. Gupta^{*1}

1. University of North Dakota, Mechanical Engineering, USA

HTCMC-12 Symposium 3- Polymer Derived Ceramics and Composites

HTCMCS3- Preceramic Polymers and Polymer-Derived Ceramics V

Room: Sandpiper A

Session Chairs: Matthew Dickerson, Air Force Research Laboratory; Kathy Lu, University of Alabama at Birmingham

1:30 PM

PPP- The effect of oxygen and excess carbon on the densification behavior of polycrystalline SiC fibers stabilized by electron beam irradiation

1:32 PM

(HTCMC-S3-015-2026) Wrinkled SiOC ceramic surfaces via UV-thermal dual curing of novel polysiloxane precursors

M. Sobczak^{*1}; T. Li¹; K. Song¹

1. University of Georgia, Mechanical Engineering, USA

1:52 PM

(HTCMC-S3-016-2026) Light-driven transformations of polymers to ceramics (Invited)

R. Hickey^{*1}; B. Stovall¹; A. Katona²; T. Coutinho de Carvalho¹; A. Ul Hosna³; A. van Duin^{3,1}; J. Maria¹; B. Lear²

1. The Pennsylvania State University, Materials Science and Engineering, USA
2. The Pennsylvania State University, Chemistry, USA
3. The Pennsylvania State University, Mechanical Engineering, USA

2:22 PM

(HTCMC-S3-017-2026) Formulation and filler effects on the printability and properties of polymer-derived ceramic lattices (Invited)

M. Jakubinek^{*1}; H. Yazdani Sarvestani²; A. Kulkarni²; T. Lacelle¹; C. Nojavan²; A. Robitaille³; B. Ashrafi²

1. National Research Council Canada, Division of Emerging Technologies, Canada
2. National Research Council Canada, Aerospace Research Centre, Canada
3. Defence Research and Development Canada, Valcartier Research Centre, Canada

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites

HTCMCS4- SiC-based composites I

Room: Silver Pearl 1-3

Session Chair: Alex Leide, UKAEA

1:30 PM

(HTCMC-S4-016-2026) Material design of the novel metal-SiC hybrid composites (Invited)

T. Hinoki^{*1}

1. Kyoto University, Japan

2:00 PM

(HTCMC-S4-017-2026) Advanced lightweight ceramic composites with short fiber reinforcement for aeronautical applications (Invited)

M. Bechelany^{*1}; E. Bouillon¹

1. Safran SA, Safran Ceramics, France

2:30 PM

(HTCMC-S4-018-2026) Development of SiC core material for LWR (Invited)

T. Nishimura^{*1}; M. Ukai¹; S. Suyama²; T. Takada¹; S. Kuboya¹; M. Akimoto¹; R. Kojima¹

1. Kabushiki Kaisha Toshiba, Japan
2. Toshiba Energy Systems & Solutions Corporation, Japan

HTCMC-12 Symposium 7- Materials for Extreme Environments – UHTCs, MAX phases, and nanolaminates

HTCMCS7- Response of UHTCs/UHTCMCs in Extreme Environments I

Room: Osprey

Session Chair: Elizabeth Golightly, University of Virginia

1:30 PM

(HTCMC-S7-018-2026) Aerothermal response of leading edge prototypes made of Pan or Pitch based Cf – reinforced UHTCs

D. Sciti^{*4}; A. Vinci⁴; L. Zoli⁴; A. Airolidi¹; A. Caporale²; M. De Stefano Fumo³

1. Politecnico di Milano, Dept. of Aerospace Science and Technology, Italy
2. Politecnico di Milano, Italy
3. Centro Italiano Ricerche Aerospaziali, Italy
4. Consiglio Nazionale delle Ricerche, Italy

1:50 PM

(HTCMC-S7-019-2026) High-enthalpy testing of UHTCMC leading edges under hypersonic flow conditions

L. Baier^{*1}; M. Friess¹; N. Hensch¹; O. Hohn¹; J. Schukraft²

1. Deutsches Zentrum für Luft- und Raumfahrt DLR, Germany
2. Deutsches Zentrum für Luft- und Raumfahrt DLR, Ceramic composites and Structures, Germany

2:10 PM**(HTCMC-S7-020-2026) High temperature ablation resistance of C_f/ZrC-SiC UHTCMCs formed by electrophoretic co-deposition**M. J. Ammendola^{*1,2}; N. Tran²; C. Mosebey^{2,3}; A. Ghoshal²; D. E. Wolfe¹

1. The Pennsylvania State University, Materials Science and Engineering, USA
2. US Army Combat Capabilities Development Command Army Research Laboratory Aberdeen Proving Ground, USA
3. SURVICE Engineering Company LLC, USA

2:30 PM**(HTCMC-S7-021-2026) Surface erosion resistance of carbon fiber reinforced ultra-high-temperature ceramic matrix composites in harsh environments**A. Nishikawa^{*1}; Y. Arai¹; R. Inoue¹

1. Tokyo University of Science, Japan

2:50 PM**PPP- Ultra-High Temperature (UHT) Processing of Refractory Metal Borides and Carbides at 2500°C****2:52 PM****PPP- Textured ZrB₂ ceramics self-reinforced by aligned elongated grains via strong magnetic field alignment****HTCMC-12 Symposium 8- Testing and Evaluation of Ceramic Matrix Composites from Constituents and Coupons to Components, including EBCs****HTCMCS8- Environmental effects, thermo-mechanical creep, fatigue performance and tribology**

Room: Pelican

Session Chairs: Ken Goto, Japan Aerospace Exploration Agency; George Jefferson, USAF

1:30 PM**(HTCMC-S8-019-2026) Retained strength of SiC/SiC CMC after exposure to combustion environment (Invited)**C. Smith^{*1}; A. S. Almansour²; M. J. Presby³; R. I. Webster¹

1. NASA Glenn Research Center, USA
2. NASA Glenn Research Center, Mechanical Engineering, USA
3. NASA Glenn Research Center, Environmental Effects and Coatings Branch, USA

2:00 PM**(HTCMC-S8-020-2026) Behaviour of SiC/SiC composites under thermomechanical stress combining flame and tensile testing**E. Perret¹; A. Bernardot¹; S. Denneulin^{*2}; V. Herb²; J. Mateo²

1. Institut de Recherche Technologique Antoine de Saint-Exupery, Ceramix Matrix Composites Division, France
2. Safran SA, CERAMICS, France

2:20 PM**(HTCMC-S8-021-2026) Oxidation behavior through cracks of unidirectional ceramic composites in dry and wet air (Invited)**S. Kanazawa^{*1}; F. W. Zok²

1. IHI Corporation, Japan
2. University of California Santa Barbara, USA

2:50 PM**(HTCMC-S8-022-2026) Demonstration of a new test method for evaluating fatigue crack growth in SiC fiber/SiC matrix composites at elevated temperatures in air**N. Ikegami^{*1}; T. Ogasawara¹; T. Aoki²

1. Tokyo Noko Daigaku - Koganei Campus, Japan
2. Japan Aerospace Exploration Agency, Advanced Composite Research Center, Institute of Aeronautical Technology, Japan

HTCMC-12 Symposium 10- CMC Applications I – Aerospace Propulsion and Structures**HTCMCS10- Design and Testing of CMC Components for Aerospace Applications II**

Room: Shorebreak 1

Session Chairs: Jared Weaver, GE Aerospace; Richard Jones, Pratt & Whitney

1:30 PM**(HTCMC-S10-014-2026) CMCs components development for aero-turbine, in Safran (Invited)**E. Bouillon^{*1}

1. Safran SA, Safran Ceramics, France

2:00 PM**(HTCMC-S10-016-2026) CMC turbine vane subelement testing and validation (Invited)**K. Rugg^{*1}

1. Pratt and Whitney, USA

HTCMC-12 Symposium 11- CMC Applications II – Solar, Nuclear and Propulsion Systems**HTCMCS11- SiC CMC for nuclear applications I**

Room: Sandpiper D

Session Chair: Peter Tatarko, Institute of Inorganic Chemistry, Slovak Academy of Sciences

1:30 PM**(HTCMC-S11-015-2026) Development of SiGA[®] Silicon Carbide Composite Cladding Technology for the Light Water Reactor Fleet (Invited)**S. Gonderman^{*1}; S. Oswald¹; L. Borowski¹; A. Giles¹; W. McMahon¹; R. Haefelfinger¹; D. Kuebler¹; L. Hunter¹; A. Moore¹; G. Lovelace¹; A. Langevin¹; A. Sathrum¹; C. Deck¹; G. Jacobsen¹; H. Khalifa¹

1. General Atomics Electromagnetic Systems Group, Nuclear Technologies and Materials, USA

2:00 PM**(HTCMC-S11-016-2026) Metal/SiC interactions in SiC/SiC composites: Diffusion-driven reaction kinetics and implications for Generation IV reactor applications**F. Bourlet^{*1}; C. Lorrette¹

1. Commissariat à l'énergie atomique et aux énergies alternatives Siege administratif, France

2:20 PM**(HTCMC-S11-017-2026) Mechanical characterization and scaling of SiC composite nuclear fuel cladding**J. Quan^{*1}; S. Gonderman¹; R. Haefelfinger¹; S. Oswald¹; L. Borowski¹; A. Giles¹; G. Jacobsen¹; H. Khalifa¹

1. General Atomics Electromagnetic Systems Group, NTM, USA

2:40 PM**(HTCMC-S11-018-2026) Irradiation effect on constituents of SiC composites**T. Hinoki^{*1}; Y. Zhong¹; J. Lee¹; S. Kondo²

1. Kyoto University, Japan
2. Tohoku University, Institute for Materials Research, Japan

3:00 PM**PPP- Irradiation-condition dependence of heavy-ion-induced flow for surface damage recovery in oxide ceramics****3:02 PM****Break****3:20 PM****Global Industry Leaders' Roundtable**

Silver Pearl 1- 3

Posters

Room: Corals Ballroom 3, 4, 5

5:30 PM

(Poster001-2026) Design of multi-elemental oxides for thermal barrier coatings using first-principles molecular dynamics and machine learning potentialR. Masuda*¹; T. Kurata¹; R. Inoue¹; Y. Kogo¹; Y. Arai¹

1. Tokyo Rika Daigaku, Japan

(Poster002-2026) Advanced manufacturing of ceramic materials via novel compositionsM. Sobczak*¹; T. Li¹; D. Patil¹; A. Ramanathan¹; S. Thummalapalli¹; K. Song¹

1. University of Georgia, Mechanical Engineering, USA

(Poster003-2026) Controlling cracking behavior of preceramic polymers via manipulation of gelation conditionsI. Fisher*¹; J. Wiggins²

1. University of Southern Mississippi, USA
 2. University of Southern Mississippi College of Arts and Science, Polymer Science and Engineering, USA

(Poster004-2026) The effect of oxygen and excess carbon on the densification behavior of polycrystalline SiC fibers stabilized by electron beam irradiationH. Lee*^{1,2}; T. Kim^{1,2}; Y. Jeong²; K. Cho¹; Y. Joo¹

1. Korea Institute of Ceramic Engineering and Technology, Republic of Korea
 2. Pusan National University College of Engineering, Republic of Korea

(Poster005-2026) Thermal and radiative heat transport in Gd₂Zr₂O₇ for thermal barrier coating applications: A first-principles studyM. Harish*¹; K. Sasihithlu¹

1. Indian Institute of Technology Bombay, Energy Science and Engineering, India

(Poster007-2026) Scale-dependent Tg in amorphous PEKK nanocomposites from structural and thermomechanical analysisC. R. Dixon*¹; J. Wiggins²

1. University of Southern Mississippi, Polymer Science and Engineering, USA
 2. University of Southern Mississippi College of Arts and Science, Polymer Science and Engineering, USA

(Poster008-2026) Oxygen flow rate as a parameter for UHTC's oxidation behaviour under oxyacetylene flameR. Beringue*¹; S. Zaoui¹; L. Maillé¹; J. Braun^{1,2}; F. Rebillat¹

1. Laboratoire des Composites Thermostructuraux, France
 2. Commissariat à l'énergie atomique et aux énergies alternatives Direction des applications militaires Le Ripault, France

(Poster010-2026) Effects of filler composition on the joint properties of SiC joined by Si-C reaction bondingS. Park*¹; S. Joo¹; J. Jung¹; S. Bang¹; D. Yoon¹

1. Yeungnam University, School of Materials Science and Engineering, Republic of Korea

(Poster011-2026) Irradiation-condition dependence of heavy-ion-induced flow for surface damage recovery in oxide ceramicsT. Miyagishi*^{1,2}; S. Kondo²; Y. Ogino²; K. Yabuuchi²; M. Park²; H. Yu²; A. Hasegawa²; R. Kasada²

1. Tohoku University, Graduate School of Engineering, Japan
 2. Tohoku University, Institute for Materials Research, Japan

(Poster012-2026) Degradation of mechanical properties of single-crystal 8YSZ – Effects of point defects from reduction treatment in vacuum at high temperature –N. Baba*¹; J. Tatami¹; T. Ohji¹; M. Iijima¹; T. Takahashi²; H. Nakano³; D. Mlnami²; K. Matsui¹

1. Yokohama Kokuritsu Daigaku, Japan
 2. Chiho Dokuritsu Gyosei Hojin Kanagawa Kenritsu Sangyo Gijutsu Sogo Kenkyujo, Japan
 3. Toyohashi Gijutsu Kagaku Daigaku, Japan

(Poster013-2026) In-situ OCT visualization of internal structure evolution in alumina slip casting: Roles of mold geometry and dispersant contentA. Honda*¹; J. Tatami¹; M. Iijima²

1. Yokohama National University, Japan
 2. Yokohama National University, Graduate School of Environment and Information Sciences, Japan

(Poster014-2026) Reduced-order modeling of gas-solid flows with heat transfer via a frequency-based approachM. T. Castro*¹; S. Li¹; H. Imai¹; K. Yang¹; T. Imatani¹; M. Sakai¹

1. Tokyo Daigaku, Department of Nuclear Engineering and Management, Japan

(Poster015-2026) Synthesis of Na-A zeolites from coal residual fractions for agronomic application as slow-release ammonium carriersE. F. Olivo*^{1,2}; M. d. Pereira^{1,2}; C. Borgert³; J. Acordil⁴; R. B. Santos⁵; F. Raupp-Pereira¹

1. Universidade do Extremo Sul Catarinense, Graduate program in materials science and engineering, Brazil
 2. Instituto Politecnico de Viana do Castelo, Master's program in Mechanical Engineering, Energy and Materials, Portugal
 3. Universidade Federal de Santa Catarina, Graduate Program in Chemical Engineering (PósENQ), Brazil
 4. Instituto Politecnico de Viana do Castelo, Materials, Energy and Environment for Sustainability, Portugal
 5. Universidade de Ribeirao Preto, Postgraduate Program in Environmental Technology, Brazil

(Poster016-2026) Fabrication and structural analyses of Hf_xZr_{1-x}O₂ gate insulators by chemical slution deposition methodR. Takemoto*¹; T. Nakazawa¹; H. Takese¹; M. Kikuchi¹; Y. Hirofuji¹; K. Koike¹; N. Hiroshiba¹

1. Osaka Kogyo Daigaku Nano Zairyo Microdevice Kenkyu Center, Japan

(Poster017-2026) Electrochemical performance of Silicon oxy-carbide (SiOC) in ionic liquids (ILs) for high temperature adaptable Li-ion batteriesM. Hossain*¹; D. Soares¹

1. Wichita State University, Electrical and Computer Engineering, USA

(Poster018-2026) Grain-scale fracture resistance in silicon nitride ceramics measured using microcantilever specimensT. Saito*²; T. Ohji²; T. Takahashi¹; M. Iijima²; J. Tatami²

1. Kanagawa Institute of Industrial Science and Technology, Japan
 2. Yokohama National University, Japan

(Poster020-2026) Three-dimensional continuum damage-based constitutive model for C/C–SiC composites fabricated via liquid silicon infiltrationM. Zered*¹; A. Bikbulatov¹; R. Padan¹; E. Levin²; R. Haj-Ali¹

1. Tel Aviv University, Israel
 2. Rafael Advanced Defense Systems Ltd, Israel

(Poster021-2026) In-situ high-temperature fracture behavior of polymer-derived SiC fibers under thermal shock in airY. Joo*¹; K. Cho¹; H. Lee¹

1. Korea Institute of Ceramic Engineering and Technology, Aerospace&Defense Research Group, Republic of Korea

(Poster022-2026) Development of reaction bonded alumina short fiber reinforced oxide ceramic matrix composites based on an injection molding processA. Gramsch*¹; J. H. Stiller¹; K. Roder¹; D. Nestler¹; L. Kroll¹

1. Technische Universität Chemnitz Fakultät für Maschinenbau, Department of Lightweight Structures, Germany

(Poster023-2026) New alumina matrix for high performance oxide CMCJ. Fourcade*¹; L. Marra¹; I. Metzger¹

1. Baikowski SAS, France

(Poster024-2026) Textured ZrB₂ ceramics self-reinforced by aligned elongated grains via strong magnetic field alignmentC. Zhibo*¹; O. Vasylykiv¹; M. Estili²; T. S. Suzuki³

1. Busshtsu Zairyo Kenkyu Kiko, Research Center for Electronic and Optical Materials, Japan
 2. National Institute for Materials Science (NIMS), Advanced Ceramics Group, Japan
 3. National Institute for Materials Science, Optical Ceramics Group, Japan

(Poster025-2026) Ultra-high temperature (UHT) processing of refractory metal borides and carbides at 2500°CL. Sandoval*¹; S. Shantha-Kumar²; A. Bronson²

1. California State University Long Beach, USA
 2. The University of Texas at El Paso College of Engineering, Aerospace and Mechanical Engineering, USA

(Poster026-2026) Ablation behavior of ZrB₂-SiC composites: Evaluation of bulk and joined materialsW. Tak*¹; W. Kim¹; Y. Joo¹; K. Cho¹

1. Korea Institute of Ceramic Engineering and Technology, Aerospace&Defense Research Group, Republic of Korea

(Poster027-2026) In-SEM single-fiber-push-out tests of ceramic matrix composites – Fiber-matrix-bonding distribution within a whole fiber bundleN. Langhof*; F. Wich; P. Springer Simonova¹; S. Schafföner¹

1. Universität Bayreuth, Chair of Ceramic Materials Engineering, Germany

(Poster028-2026) Accessing the high-temperature thermophysical and mechanical properties of C/C-SiC materials with varying fiber volume contents up to 1350 °CF. Wich*; F. Ebrahimi¹; N. Langhof; S. Schafföner¹

1. Universität Bayreuth, Ceramic Materials Engineering, Germany

(Poster029-2026) Diffusion-Induced grain boundary migration during sintering of a Gd₂O₃-ZrO₂ composite for burnable absorber application in small modular reactorsS. Jeon*; Y. Kim¹; H. Gu¹; A. Park¹; S. Ha²; Y. Na²; K. Lim²

1. Changwon National University, Materials Science and Engineering, Republic of Korea
2. KEPCO NF, Republic of Korea

(Poster030-2026) Irradiation test of neutron absorber pellets for control rod of light water reactorsJ. Yang*; D. Kim¹; D. Kim¹; K. Lim²

1. Korea Atomic Energy Research Institute, Republic of Korea
2. KEPCO NF, Republic of Korea

(Poster031-2026) Synthesis and photocatalytic activity of TiO₂ nanoparticles for the degradation of the drug N-(4-hydroxyphenyl)ethanamide (paracetamol)M. d. Pereira*; E. F. Olivo²; F. Raupp-Pereira¹; M. Ribeiro³; A. M. Bernardin²

1. Universidade do Extremo Sul Catarinense, Brazil
2. Universidade do Extremo Sul Catarinense, Graduate program in materials science and engineering, Brazil
3. Instituto Politecnico de Viana do Castelo, Portugal

(Poster032-2026) Thermal analyses of zeolite/poly lactide filaments for additive manufacturing of the flowing islandsM. T. Sitarz*; J. Marchewka²

1. AGH University of Science and Technology, Faculty of Materials Science and Ceramics, Poland
2. Akademia Gorniczo-Hutnicza im Stanislaw Staszica w Krakowie, Faculty of Materials Science and Ceramics, Poland

(Poster033-2026) The development status of SiC heating elements in KoreaY. Seong*; I. Han¹; D. Seo¹; H. Hwang¹; S. Lee¹; S. Kim¹; S. Kim¹; H. Bang¹

1. Korea Institute of Energy Research, Republic of Korea

(Poster035-2026) Dielectric and magnetic properties of the FE-Y₂DyFe₅O₁₂ ceramic compositesD. Brzezinska*; D. Bochenek¹; M. Zubko¹; A. Chrobak¹

1. University of Silesia in Katowice, Faculty of Science and Technology, Institute of Materials Engineering, Poland

(Poster036-2026) Fabrication and mid-infrared optical properties of transparent Er:Sc₂O₃ ceramicsZ. Xu^{2,1}; H. Furuse*; T. S. Suzuki^{1,2}

1. National Institute for Materials Science (NIMS), Japan
2. Waseda Daigaku, Japan

(Poster037-2026) Influence of rare-earth elements on the functional properties of BZT-BCT ceramicsJ. Makowska*; M. Adamczyk-Habrajska¹; B. Wodecka-Dus¹

1. Uniwersytet Slaski w Katowicach, Poland

(Poster038-2026) Technology and properties of multi-component multiferroic ceramic composites PMN-PT-PS-FerriteD. Bochenek*; D. Brzezinska¹; M. Zubko¹; A. Chrobak¹

1. University of Silesia in Katowice, Faculty of Science and Technology, Institute of Materials Engineering, Poland

(Poster039-2026) Synthesis, microstructural evolution and dielectric properties of BLT ceramics modified with a special glass admixtureB. Wodecka-Dus*; J. Makowska¹; M. Adamczyk-Habrajska¹

1. Uniwersytet Slaski w Katowicach, Faculty of Science and Technology, Poland

(Poster040-2026) Interfacial control for accelerating charge transfer in secondary batteriesT. Teranishi*^{1,2}; A. Kishimoto¹

1. Okayama University, Japan
2. Institute of Science Tokyo, Japan

(Poster041-2026) Effect of E-Glass Powder Addition on Characteristics of Blast Furnace Slag-Based Glass MarblesJ. Lee*¹

1. Korea Institute of Ceramic Engineering and Technology (KICET), Republic of Korea

(Poster042-2026) Chemical robustness of aqueous quasi-solid-electrolyte (3D-SLISE) and their batteriesY. Shiratori*; S. Yasui¹

1. Tokyo Kagaku Daigaku, Japan

Wednesday, June 3, 2026

GFMAT-3 Symposium 1- Powder Processing Innovation and Technologies for Advanced Materials and Sustainable Development**GFMATS1- Low-cost and energy-saving processing of advanced ceramics and ceramic composites, including smart recycling of materials for sustainable development**

Room: Shorebreak 2

Session Chairs: Takamasa Mori, Hosei Daigaku Seimei Kagakubu; Wenwu Xu, San Diego State University

8:40 AM**(GFMAT-S1-017-2026) Development of functional materials using interfacial reaction fields by powder technology (Invited)**T. Shirai*¹

1. Nagoya Kogyo Daigaku, Advanced Ceramics Research Center, Japan

9:10 AM**(GFMAT-S1-018-2026) Reaction sintering synthesis of tungsten tetraboride at relevant scale via electric field assisted sintering**A. Preston*; J. Rufner²

1. Idaho National Laboratory, USA
2. Idaho National Lab, Materials Science and Manufacturing, USA

GFMATS1- Particle dispersion control in liquid or polymers

Room: Shorebreak 2

Session Chairs: Koji Morita, National Institute for Materials Science (NIMS); Arin Preston, Idaho National Laboratory

9:30 AM**(GFMAT-S1-019-2026) Dispersion of conductive nanomaterials in structural adhesives for easy disassembly using high-voltage electrical pulses (Invited)**H. Kamiya*^{2,1}; M. Inutsuka²; K. Matsuo³; Y. Okada⁴; S. Yamashita^{4,5}; M. Kubo⁶; T. Saito⁶; C. Tokoro²

1. Tokyo University of Agriculture and Technology, Institute of Engineering, Japan
2. Waseda University, Japan
3. Waseda Daigaku Riko Gakujutsuin, Japan
4. Institute of Agriculture, Japan
5. Tokyo Noko Daigaku, Japan
6. Tohoku Daigaku, Japan

10:00 AM**Break**

10:20 AM**(GFMAT-S1-020-2026) Do slurries decide density?— Flow or packing: What really controls it? — (Invited)**T. Mori*¹

1. Hosei Daigaku Seimei Kagakubu, Japan

10:50 AM**(GFMAT-S1-021-2026) Structural and physical property evaluation of multi-component slurries for sheet-forming processes**K. Kitamura*^{1,2}; T. Mori^{3,2}

1. Hosei Daigaku, Chemical Science and Technology, Japan
2. Hosei Daigaku, Hosei University Research Institute for Slurry Engineering, Japan
3. Hosei Daigaku Seimei Kagakubu, Japan

11:10 AM**(GFMAT-S1-022-2026) Hollow silica nanoparticle-polymer composite films and their thermal insulation properties**K. Ishii*¹; Y. Yoshida¹; R. Ichihara¹; M. Fujii¹

1. Nagoya Institute of Technology, Japan

GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications

GFMATS6- All-solid-state Batteries I

Room: Tidepool 1

Session Chairs: Saneyuki Ohno, Kyushu Daigaku; Kentaro Yamamoto, Nara Women's University

8:30 AM**(GFMAT-S6-017-2026) NASICON-based materials: A wonderful "crystal-chemistry" playground (Invited)**J. Chotard*³; N. Subash³; P. Cabelguen¹; F. Fauth²; C. Masquelier³

1. Umicore, Belgium
2. CELLS-ALBA Synchrotron, Spain
3. Laboratoire Reactivite et Chimie des Solides, France

9:00 AM**(GFMAT-S6-018-2026) Comprehensive safety evaluation of solid-state batteries compared to lithium-ion (Invited)**N. B. Johnson*¹

1. Sandia National Laboratories, Power Sources R&D, USA

9:30 AM**(GFMAT-S6-019-2026) Challenges of transport limitations in solid-state Li-S batteries (Invited)**S. Ohno*¹

1. Tohoku Daigaku, Institute of Multidisciplinary Research for Advanced Materials, Japan

10:00 AM**Break****10:20 AM****(GFMAT-S6-020-2026) Mechanisms of ion-transport and interfacial stability in argyrodite electrolytes for solid-state lithium batteries (Invited)**B. Narayanan*¹; V. Shreyas¹; S. Gupta¹

1. University of Louisville, Mechanical Engineering, USA

10:50 AM**(GFMAT-S6-021-2026) Interface design for all-solid-state lithium metal batteries operable at room temperature and low pressure (Invited)**W. Zhang*¹

1. Nanyang Technological University, Electrical and Electronic Engineering, Singapore

11:20 AM**(GFMAT-S6-022-2026) How can glass help us to discover new materials**C. Chenier*¹; M. Serhane¹; D. Chartrand¹; G. Foran¹; S. Rousselot¹; M. Dollé¹

1. Universite de Montreal, Chemistry, Canada

GFMAT-3 Symposium 10- Materials Recycling for Energy and Environment Applications

GFMATS10- Disassembly and recycling solutions for end-of-life batteries, fuel cells

Room: Sandpiper C

Session Chairs: Kenta Iyoki, Tokyo Daigaku Daigakuin Shinryoiki Sosei Kagaku Kenkyuka; Asako Narita, Waseda University; Surojit Gupta, University of North Dakota

8:30 AM**(GFMAT-S10-001-2026) Sustainable synthesis of zeolites and their applications (Invited)**K. Iyoki*¹

1. Tokyo Daigaku Daigakuin Shinryoiki Sosei Kagaku Kenkyuka, Environment Systems, Japan

9:00 AM**(GFMAT-S10-002-2026) Separation of lithium-ion batteries from small appliances using high-voltage electrical pulses - aiming for both safety and resource circulation - *WITHDRAWN***A. Narita*³; T. Kirihara¹; C. Tokoro^{3,2}

1. Waseda Daigaku, Graduate School of Creative Science and Engineering, Japan
2. Tokyo Daigaku, Faculty of Engineering, Japan
3. Waseda Daigaku Riko Gakujutsuin, Japan

9:20 AM**(GFMAT-S10-003-2026) Recovery of carbon fibers from unidirectional CFRP laminates using direct electrical pulsed discharge**K. Sato*¹; M. Inutsuka²; C. Tokoro³

1. Waseda Daigaku, Graduate School of Creative Science and Engineering, Japan
2. Waseda Daigaku, Waseda Center for a Carbon Neutral Society, Japan
3. Waseda Daigaku, Faculty of Science and Engineering, Japan

GFMATS10- Life cycle analysis and techno-economic analysis of the technologies

Room: Sandpiper C

Session Chair: Motoyuki Iijima, Yokohama National University

9:40 AM**(GFMAT-S10-016-2026) Design and development of next generation biomass based recycling technologies**S. Gupta*¹

1. University of North Dakota, Mechanical Engineering, USA

10:00 AM**Break****10:20 AM****(GFMAT-S10-005-2026) Improving high temperature ceramic composites for sustainable energy applications**G. Kimotho*¹

1. University of Nairobi, Research, Kenya

10:40 AM**(GFMAT-S10-006-2026) LCA driven recycling of yttrium disilicate: Towards a circular economy for environmental barrier coatings**C. Augéard*^{1,2}; G. Sonnemann²; C. Aymonier¹

1. Institut de Chimie de la Matière Condensée de Bordeaux, France
2. Institut des Sciences Moleculaires, CyVi, France

11:00 AM

(GFMAT-S10-007-2026) Fabrication and detailed study of novel MoAlB/Cr2AlC waste glass composites (Invited)M. Dey*¹; E. Sofowora²; E. Oloo¹; J. Zhang¹; S. Gupta¹

1. University of North Dakota, Mechanical Engineering, USA
2. University of North Dakota, Chemical Engineering, USA

11:30 AM

(GFMAT-S10-008-2026) Effect of multi-directional fiber architecture on the microstructure and mechanical properties of C-SiC_m compositesS. Roy*¹; A. Mahato²; S. Mondal¹; M. Thangarasu¹; S. K. Sahoo¹; A. Meena¹

1. Indian Institute of Technology Kharagpur, Materials Science Center, India
2. Indian Institute of Technology Kharagpur, School of Nanoscience and Technology, India

Young Professionals Forum**HTCMC-GFMAT- YPF- Ceramic-Based Composites I**

Room: Sandpiper B

Session Chairs: Nico Langhof, University of Bayreuth; Dong Liu, University of Oxford

8:30 AM

(YPF-001-2026) Thermoset injection molding as shaping possibility for C/C-SiC production (Invited)J. H. Stiller*¹; D. Nestler¹; L. Kroll¹

1. Technische Universität Chemnitz Fakultät für Maschinenbau, Department of Lightweight Structures, Germany

9:00 AM

(YPF-002-2026) The detrimental role of the fiber volume content in reactive melt infiltrated C/C-SiC Processing-Microstructure-Property correlations (Invited)F. Wich*¹; F. Ebrahimi¹; N. Langhof¹; S. Schafföner¹

1. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany

9:30 AM

(YPF-003-2026) Silica-carboxymethyl cellulose macrobeads as scalable templates for metal-organic framework growth (Invited)P. K. Kimani*¹; C. Takai-Yamashita^{1,2}; M. Fujii¹

1. Nagoya Kogyo Daigaku, Advanced Ceramics Research Institute, Japan
2. Tohoku Daigaku, Institute of Multidisciplinary Research for Advanced Materials, Japan

10:00 AM

Break

HTCM-GFMAT-YPF- Ceramic-Based Composites II

Room: Sandpiper B

Session Chair: Meelad Ranaiefar, NASA Glenn Research Center

10:20 AM

(YPF-004-2026) Prepreg-based oxide fiber composites – Processing influences, repeatability, and properties (Invited)G. Puchas*¹; L. Wagner¹; F. Lindner¹; A. Held¹; S. Schafföner¹; W. Krenkel¹

1. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany

10:50 AM

(YPF-005-2026) Manufacturing and application of HTCMCs for space application at the German Aerospace Center (DLR) (Invited)L. Baier²; I. Petkov²; T. Reimer¹; G. Di Martino¹; C. Rauh¹; D. Hargarten³; A. Gülhan⁴; H. Weihs¹; J. Schukraft*²

1. Deutsches Zentrum für Luft- und Raumfahrt DLR, Space System Integration, Germany
2. Deutsches Zentrum für Luft- und Raumfahrt DLR, Ceramic Composites and Structures, Germany
3. Deutsches Zentrum für Luft- und Raumfahrt DLR, MORABA, Germany
4. Deutsches Zentrum für Luft- und Raumfahrt DLR, Supersonic and Hypersonic Technologies, Germany

11:20 AM

(YPF-006-2026) Ceramic to metal joining for high temperature oxygen separation applications (Invited)S. De La Pierre*¹; P. Fedeli²; F. Smeacetto¹; F. Drago²; M. Ferraris¹

1. Politecnico di Torino, DISAT, Italy
2. Ricerca sul Sistema Energetico RSE SpA, Italy

HTCMC-12 Symposium 3- Polymer Derived Ceramics and Composites**HTCMCS3- Pre ceramic Polymers and Polymer-Derived Ceramics VI**

Room: Sandpiper A

Session Chairs: Matthew Dickerson, Air Force Research Laboratory; Timothy Prun, Air Force Research Laboratory

8:30 AM

(HTCMC-S3-018-2026) Structure modification of pre ceramic polymer grafted nanoparticles for tunable pre ceramic processability and polymer derived ceramic composition (Invited)J. Ponder*¹; A. Advincula¹; J. Zackasee¹; J. Delcamp²; T. Prun²; M. B. Dickerson²

1. AV Inc., USA
2. Air Force Research Laboratory, Materials and Manufacturing Directorate, USA

9:00 AM

(HTCMC-S3-019-2026) Multi-step kinetic modeling of polysilazane pyrolysis *WITHDRAWN*J. Fischer*¹; R. Walker¹; J. Efferson²; D. Gilmer¹

1. The University of Tennessee Knoxville Tickle College of Engineering, Materials Science and Engineering, USA
2. The University of Tennessee Knoxville Tickle College of Engineering, Nuclear Engineering, USA

9:20 AM

(HTCMC-S3-020-2026) Design of tailored polymeric precursors enabling high-performance UHTCs via the PIP routeJ. So*¹; K. Lee¹; H. Hwang¹; J. Choi¹; S. Lee¹

1. Korea Institute of Materials Science, Republic of Korea

9:40 AM

(HTCMC-S3-021-2026) Evolution of C/SiC fiber/matrix microstructure under field-assisted sintering technique (FAST)S. Kusdono*¹; S. Nutt¹

1. University of Southern California, Mork Department of Materials Science and Chemical Engineering, USA

10:00 AM

Break

10:20 AM

(HTCMC-S3-022-2026) Processing and performance of fiber-reinforced polymer-derived CMCs for harsh environment applicationsA. Moore*¹; G. Lovelace¹; L. Hunter¹; A. Langevin¹; J. Hepp¹; J. Williams¹; A. Sathrum¹; I. Ivanov¹; N. Pacheco¹; C. Deck¹; H. Khalifa¹

1. General Atomics Electromagnetic Systems Group, NTM, USA

10:40 AM

(HTCMC-S3-023-2026) Microstructural and defect evolution in polytitanoxane-derived titanium carbide systems for next-generation CMCs *WITHDRAWN*K. Y. Wickramathilaka*¹; S. L. Suib¹

1. University of Connecticut, USA

HTCMCS3- Pre-ceramic Polymers and Polymer-Derived Ceramics VII

Room: Sandpiper A

Session Chairs: Timothy Pruy, Air Force Research Laboratory; Jordan Zackasee, Air Force Research Laboratory

11:00 AM**(HTCMC-S3-024-2026) Process parameters – mechanical properties relationships for metakaolin geopolymers used in continuous fiber composites and chemical foams**D. Habans*¹; É. Prud'homme¹; P. Reynaud¹; T. Cutard²; G. Dusserre²; G. Fantozzi¹

1. Institut National des Sciences Appliquées de Lyon, MATEIS, France
2. Ecole Nationale Supérieure des Mines d'Albi-Carmaux, ICA, CNRS UMR5312, France

11:20 AM**(HTCMC-S3-025-2026) Radio frequency transparent materials based on geopolymers ~~WITHDRAWN~~**A. El Khomsi*¹; A. Gharzouni¹; E. Martinod²; S. Rossignol¹

1. Institut de Recherche sur les Céramiques, UMR-CNRS-7315, France
2. XLIM - UMR CNRS 7252, France

11:40 AM**(HTCMC-S3-026-2026) The effect of dopants and controlled cooling rates on solar thermal properties of fayalitic slags**G. Alkan*³; P. Mechnich²; D. Schneider²; F. Flucht³; B. Kölsch¹; B. Friedrich²

1. Deutsches Zentrum für Luft- und Raumfahrt DLR, Germany
2. Rheinisch-Westfälische Technische Hochschule Aachen, Germany
3. DLR - German Aerospace Center, Institute of Frontier Materials on Earth and in Space, Germany

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites**HTCMCS4- SiC-based composites II**

Room: Silver Pearl 1

Session Chair: Sea-Hoon Lee, Korea Institute of Materials Science

8:30 AM**(HTCMC-S4-019-2026) C/C-SiC sandwich structures for optical benches (Invited)**B. Heidenreich*¹; D. Boban²; O. Simone²; M. Berrill³

1. German Aerospace Center, Germany
2. Thales Alenia Space Cannes la Bocca, France
3. European Space Research and Technology Centre, Netherlands

9:00 AM**(HTCMC-S4-020-2026) Deposition of porous carbon via C_xH_y-based CVD for liquid silicon infiltrated SiC_f/SiC composites**D. Kim*¹; J. Lee^{1,2}; W. Kim³

1. Korea Atomic Energy Research Institute, Materials Safety Technology Research Division, Republic of Korea
2. Hanyang University, Republic of Korea
3. Korea Atomic Energy Research Institute, Republic of Korea

9:20 AM**(HTCMC-S4-021-2026) Advanced manufacturing and characterization of high-purity, stress-free SiC/SiC CMCs for high-temperature applications**A. Palumbo*¹; L. Montgomery¹; W. Fischer III¹

1. Advanced Silicon Carbide Materials, USA

9:40 AM**(HTCMC-S4-022-2026) Matrix development for non-oxide ceramic matrix composites based on the weak matrix concept**G. Puchas*¹; F. Schwedler¹; L. Wagner¹; S. Schafföner¹

1. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany

10:00 AM**Break****HTCMCS4- Advanced processing and manufacturing technologies II**

Room: Silver Pearl 1

Session Chair: Seyoung Kim, Korea Institute of Energy Research

10:20 AM**(HTCMC-S4-023-2026) Advanced CVI procession of next-generation high-temperature composite structures (Invited)**V. Papageorgiou*¹; N. Djordjevic¹; H. Strakov¹

1. IHI Bernex AG, Switzerland

10:50 AM**(HTCMC-S4-024-2026) Development of high-temperature protective coatings for ceramic matrix composites using the aerosol deposition method (Invited)**M. Hasegawa*¹

1. Yokohama National University, Graduate School of Engineering Science, Japan

HTCMC-12 Symposium 5- Advanced Thermal and Environmental Barrier Coating – Processing, Properties, and Applications**HTCMCS5- Ceramic Coatings**

Room: Silver Pearl 2/3

Session Chair: Peter Mechnich, DLR - German Aerospace Center

8:30 AM**(HTCMC-S5-001-2026) Mechanisms of CMAS interactions with rare earth monosilicates (Invited)**E. Opila*¹; C. Miller¹

1. University of Virginia, USA

9:00 AM**(HTCMC-S5-002-2026) Enhanced CMAS resistance of EBCs using yttrium-silicon-iron oxide APS coating**C. Y. Guijosa Garcia*¹; E. Garcia Granados²; P. Mechnich¹; V. Venkatachalapathy²; S. Sampath²; U. Schulz²; R. Naraparaju¹

1. DLR - German Aerospace Center, Institute of Materials Research, Germany
2. Stony Brook University, Center for Thermal Spray Research, USA

9:20 AM**(HTCMC-S5-003-2026) Microstructural and chemical analysis on multilayered sample with PDC coating for high temperature application**I. S. Nurak*¹; A. Pundt¹; Y. Eggeler²

1. Karlsruher Institut für Technologie, IAM-WK, Germany
2. Karlsruher Institut für Technologie, LEM, Germany

9:40 AM**(HTCMC-S5-004-2026) Next-generation sol-gel protective coatings against high-temperature oxidation for aeronautic applications**B. Toury*¹; L. Lager²; S. BENAYOUN²; J. Delfosse³; S. Senani - de Monredon³

1. Université Claude Bernard Lyon 1, Laboratoire des Multimatériaux et Interfaces, France
2. école centrale de Lyon, France
3. Safran SA, France

10:00 AM**Break****10:20 AM****(HTCMC-S5-005-2026) Alumina-titania-based coatings for oxide/oxide ceramic matrix composites**P. Mechnich*¹

1. DLR - German Aerospace Center, Institute of Frontier Materials on Earth and in Space, Germany

10:40 AM

(HTCMC-S5-006-2026) Deposition of ultra-high temperature ceramics by hybrid aerosol deposition (Invited)K. Shinoda*¹; T. Ghara¹; T. Nagoshi¹; S. Kuroda¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Core Manufacturing Technology Research Institute, Japan

HTCMCS5- Interface phenomena, adhesion and interfacial properties

Room: Silver Pearl 2/3

Session Chair: Peter Mechnich, DLR - German Aerospace Center

11:10 AM

(HTCMC-S5-007-2026) Mechanisms controlling the failure resistance of high entropy alloys to static and cyclic oxidation conditions (Invited)J. Liu*¹

1. University of Alberta, Canada

11:40 AM

(HTCMC-S5-008-2026) Evaluation techniques of interface toughness for environmental barrier coatings on ceramic matrix composites (Invited)H. Kakisawa*¹

1. Busshitsu Zairyo Kenkyu Kiko, Japan

HTCMC-12 Symposium 7- Materials for Extreme Environments – UHTCs, MAX phases, and nanolaminates**HTCMCS7- Processing-microstructure-property relationships of existing or new systems I**

Room: Osprey

Session Chair: Yoonjoo Lee, Korea Institute of Ceramic Engineering and Technology

8:30 AM

(HTCMC-S7-022-2026) Mechanistic insights in shear, delamination and kinking in MAX phases (Invited)M. Radovic*¹; A. Srivastava¹; M. Dujovic¹; H. J. Rathod¹; Z. Zhan¹; S. Celik¹

1. Texas A&M University, Materials Science and Engineering, USA

9:00 AM

(HTCMC-S7-023-2026) High-fidelity 3D microstructural characterization of ZrB₂ during hot-pressingR. Swanson*¹; M. Chapman²; Y. Zhou²; A. Hilmas³; L. M. Rueschhoff¹; M. D. Uchic²; W. Fahrenholtz²; S. J. McCormack¹

1. University of California Davis, Materials Science and Engineering, USA
2. Missouri University of Science & Technology, Materials Science and Engineering, USA
3. Air Force Research Laboratory Materials & Manufacturing Directorate, USA
4. Air Force Research Lab, Materials and Manufacturing Directorate, USA

9:20 AM

(HTCMC-S7-024-2026) Low-temperature synthesis of high purity ZrC with controlled carbon stoichiometryH. Gross*¹; A. Emdadi¹; J. Lonergan¹

1. Missouri University of Science & Technology, Materials Science and Engineering, USA

(HTCMC-S7-025-2026) Synthesis and evolution of ζ-phase vanadium carbide microstructures *WITHDRAWN*W. Rubink*¹

1. Lawrence Livermore National Laboratory Physical and Life Sciences Directorate, Materials Science Dept, USA

10:00 AM

Break

HTCMCS7- Processing-microstructure-property relationships of existing or new systems II

Room: Osprey

Session Chair: Sook Young Moon, Korea Institute of Science and Technology

(HTCMC-S7-026-2026) Fabrication of seamless 3D woven ceramic matrix composites via continuous through-thickness architecture (Invited) *WITHDRAWN*W. Yu*¹; J. Yang¹; Y. Oh¹

1. Seoul National University, Republic of Korea

9:40 AM

(HTCMC-S7-027-2026) Transformation and crystallization behavior of HfC_{1-x}N_x in a polymer-derived SiC matrix (Invited)Y. Lee*¹

1. Korea Institute of Ceramic Engineering and Technology, Republic of Korea

10:10 AM

BREAK

10:30 AM

(HTCMC-S7-028-2026) Optimisation of the impregnation slurry for the development of Ultra-High-Temperature Ceramic Matrix Composite (UHTCMC)F. Courjault*¹; J. Petit¹; A. DeBarre¹; A. Julian Jankowiak¹; N. Brard²

1. Office National d'Etudes et de Recherches Aérospatiales, DMAS, France
2. MBDA Holding SAS, France

10:50 AM

(HTCMC-S7-029-2026) Dynamic oxidation resistance and thermal properties of additive-free SiC ceramics and CVD-SiCO. Hanzel*¹; M. Tatarikova¹; Z. Netrová¹; M. Hicak¹; P. Sajgalik¹

1. Ústav anorganické chemie Slovenská akadémia vied, Slovakia

HTCMC-12 Symposium 8- Testing and Evaluation of Ceramic Matrix Composites from Constituents and Coupons to Components, including EBCs**HTCMCS8- Fracture mechanics, failure analysis and fractography**

Room: Pelican

Session Chairs: Takuya Aoki, Japan Aerospace Exploration Agency; Sung-Min Lee, Korea Institute of Ceramic Engineering and Technology (KICET)

8:30 AM

(HTCMC-S8-023-2026) Cf-SiC composites for high-temperature structural and hypersonic applications (Invited)U. Andi*¹

1. CSIR National Aerospace Laboratories, Materials Science Division, India

9:00 AM

(HTCMC-S8-024-2026) Analytical model for the static tensile behavior of cross-ply ceramic matrix compositesD. Haruyama*¹

1. IHI Corporation, Japan

9:20 AM

(HTCMC-S8-025-2026) Temperature-dependent fracture toughness of monolithic alumina evaluated by the disk-compression method *WITHDRAWN*N. D. Parolini*¹; A. K. Singh¹

1. Baylor University, Baylor University, Waco, TX, US, academic, Mechanical Engineering, USA

9:40 AM**(HTCMC-S8-026-2026) Fabrication conditions to enhance mechanical properties and high-temperature oxidation resistance of FB-SiC/SiC composites**

S. Teshima^{*1}; T. Kondo¹; S. Inoue¹; Y. Kubota²; M. Uda²; K. Abe³; K. Kishimoto⁴; A. Hosoi^{1,5}; H. Kawada^{1,6}

1. Waseda University, Japan
2. KENQ, INC., Japan
3. IHI AEROSPACE Co.,Ltd., Japan
4. Trade Service Corporation, Japan
5. Kagami Memorial Research Institute for Materials Science and Technology, Japan
6. Kanazawa Institute of Technology, Japan

10:00 AM**Break****HTCMCS8- Testing and Evaluation of Ceramic Matrix Composites**

Room: Pelican

Session Chairs: Dong Liu, University of Oxford; Gerard Vignoles, University Bordeaux

10:20 AM**(HTCMC-S8-027-2026) Boron nitride nanotube modified ox-ox cmcs: Processing, microstructure, and physical properties (Invited)**

E. Vargas⁴; W. Simpson^{*1,2}; L. R. Scammell³; M. G. Simpson³; S. Fast⁴; T. Henneberg³

1. Axiom Materials Inc, Technical, USA
2. University of California Irvine, Material Science & Engineering, USA
3. BNNT Materials, Applications, USA
4. University of Southern California, Materials Science and Engineering, USA
5. 3M Company, Advanced Materials, USA

10:50 AM**(HTCMC-S8-028-2026) Damage evolution during mechanical loading of oxide composites by X-ray tomography, acoustic emission and machine learning**

R. S. Almeida^{*1}; J. Horvath¹; K. Tushtev¹; K. Rezwani¹

1. University of Bremen, Germany

11:10 AM**(HTCMC-S8-029-2026) Enhancing CMAS corrosion resistance of yttrium-aluminum garnet by secondary phase addition**

N. Yamazaki^{*1}; T. Nakamura¹; S. Kitaoka²; M. Tanaka²; t. Yamamoto³

1. IHI Corporation, Japan
2. Japan Fine Ceramics Center, Japan
3. Nagoya Daigaku, Japan

11:30 AM**(HTCMC-S8-030-2026) EBC coated ceramic matrix composite (CMC) thermal mismatch parametric study via combined DIC and finite element analysis**

A. Abdul-Aziz^{*2}; M. Onifade²; R. I. Webster¹

1. NASA Glenn Research Center, USA
2. Kent State University, Aerospace, USA

HTCMC-12 Symposium 10- CMC Applications I – Aerospace Propulsion and Structures**HTCMCS10- Design and Testing of CMC Components for Aerospace Applications III**

Room: Shorebreak 1

Session Chair: Sungbo Shim, Rolls-Royce plc

8:30 AM**(HTCMC-S10-017-2026) Thin walled and light weight all oxide ceramic matrix composites (OCMC) structures for a novel propulsion system- a long development story (Invited)**

W. Pritzkow^{*1}; V. Dosch¹; F. Wehner¹; A. Evulet²

1. Walter E.C. Pritzkow Spezialkeramik, Germany
2. Jetoptera Inc, USA

9:00 AM**(HTCMC-S10-018-2026) Towards Space Rider Flight Readiness: Development, qualification, and production of C/SiC based thermal protection system (Invited)**

M. De Stefano Fumo^{*1}

1. Centro Italiano Ricerche Aerospaziali, Italy

9:30 AM**(HTCMC-S10-019-2026) Feasibility evaluation of a SiC/SiC stand-off thermal protection system**

Y. Kubota^{*1}; K. Abe²; T. Kondo³; K. Kishimoto⁴; M. Uda¹; H. Kawada³

1. KENQ, INC., Japan
2. Kabushiki Kaisha IHI Aerospace, Japan
3. Waseda Daigaku, Japan
4. Trade Service Corporation, Japan

HTCMC-12 Symposium 11- CMC Applications II – Solar, Nuclear and Propulsion Systems**HTCMCS11- SiC CMC for nuclear applications II**

Room: Sandpiper D

Session Chair: Benjamin Lamm, Oak Ridge National Laboratory

8:30 AM**(HTCMC-S11-019-2026) Revolutionizing nuclear safety: SiC ceramic matrix composites research and development at Idaho National Laboratory (Invited)**

P. Xu^{*1}; S. Gonderman²; S. Oswald³

1. Idaho National Lab, USA
2. General Atomics, USA
3. General Atomics Electromagnetic Systems Group, Nuclear Technologies and Materials, USA

9:00 AM**(HTCMC-S11-020-2026) Effect of outer coating thickness on the deformation and fracture of a SiC-based nuclear-fuel cladding at 1200°C**

G. Yuan²; E. J. Lahoda⁴; M. Ukai⁵; T. Takada⁵; P. Xu³; D. Liu^{*1}

1. University of Oxford, Engineering Science, United Kingdom
2. University of Bristol, Physics, United Kingdom
3. Idaho National Lab, USA
4. Westinghouse Electric Company LLC, USA
5. Toshiba Energy Systems & Solutions Corporation, Isogo Nuclear Engineering Centre, Japan

9:20 AM**(HTCMC-S11-021-2026) Extrusion-based processing of high-purity silicon carbide for nuclear applications**

S. Kondo^{*1}; D. Miura^{2,1}; H. Yu¹; Y. Ogino¹; R. Kasada¹

1. Tohoku University, Institute for Materials Research, Japan
2. Tohoku Daigaku, Department of Quantum Science and Energy Engineering, Graduate School of Engineering, Japan

9:40 AM**(HTCMC-S11-022-2026) Advancing SiC composite tube processing and non-destructive evaluations for nuclear applications**

T. Koyanagi^{*1}; D. Richardson¹; A. Rogers¹; B. W. Lamm²; E. Cakmak³; J. D. Arregui-Mena³

1. Oak Ridge National Laboratory, USA
2. Oak Ridge National Laboratory, Materials Science & Technology Division, USA
3. Oak Ridge National Lab, Nuclear Materials Science & Technology Group, USA

10:00 AM**Break**

HTCMCS11- Effects of operating environment on microstructure, physical and mechanical properties

Room: Sandpiper D

Session Chair: Takaaki Koyanagi, Oak Ridge National Laboratory

10:20 AM**(HTCMC-S11-023-2026) Neutron-induced radioactivity and response to atomic displacement damage of CB/BN particles dispersed SiC fabricated by liquid-phase sintering (Invited)**B. Huang*¹

1. Sun Yat-Sen University, China

10:50 AM**(HTCMC-S11-024-2026) Effects of high dose neutron irradiation at light water reactor-relevant temperatures on the mechanical properties of SiC/SiC composites**Y. Jimba*¹; T. Koyanagi¹; Y. Katoh¹

1. Oak Ridge National Laboratory, USA

11:10 AM**(HTCMC-S11-025-2026) Spatially-resolved microscale thermal conductivity measurements of ion-irradiated SiC/SiC CMCs for fusion applications**D. M. Cogbill*¹; A. J. Leide²; J. Pomeroy¹; A. Sarua¹; J. Wade-Zhu²; D. Liu³

1. University of Bristol, School of Physics, United Kingdom
2. UKAEA, Materials Division, United Kingdom
3. University of Oxford, Department of Engineering Science, United Kingdom

11:30 AM**(HTCMC-S11-026-2026) Irradiation-induced mechanical response of polymer-derived SiC: Linking defect formation to hardening**H. Singh*¹; D. Gilmer¹; K. Hattar¹

1. The University of Tennessee Knoxville Tickle College of Engineering, Material Science & Engineering, USA

Thursday, June 4, 2026**GFMAT-3 Symposium 1- Powder Processing Innovation and Technologies for Advanced Materials and Sustainable Development****GFMATS1- Novel shaping, forming, and sintering technology, including additive manufacturing**

Room: Shorebreak 2

Session Chairs: Eugene Olevisky, San Diego State University; Hui-Suk Yun, Korea Institute of Materials Science

8:30 AM**(GFMAT-S1-023-2026) Electro-Nano-Pulsing: New manufacturing paradigm (Invited)**E. Olevisky*¹

1. San Diego State University, College of Engineering, USA

9:00 AM**(GFMAT-S1-024-2026) Effect of electric field and current on high-temperature processing of 8Y-CSZ (Invited)**K. Morita*¹

1. National Institute for Materials Science (NIMS), Japan

9:30 AM**(GFMAT-S1-025-2026) Flash sintering of YSZ from atomistic modeling and experiment: Mechanisms and grain growth (Invited)**W. Xu*¹; S. Soltero¹; C. Delaney¹; T. Norris¹

1. San Diego State University, Mechanical Engineering, USA

10:00 AM

Break

10:20 AM**(GFMAT-S1-026-2026) Advanced modeling strategies for digital twins in powder processing: Challenges and opportunities (Invited)**M. Sakai*¹

1. Tokyo Daigaku, Japan

10:50 AM**(GFMAT-S1-027-2026) Approaches for selecting sustainable raw materials in ceramic additive manufacturing (Invited)**H. Yun*^{1,2}

1. Korea Institute of Materials Science, Republic of Korea
2. University of Science and Technology, Republic of Korea

11:20 AM**(GFMAT-S1-028-2026) Study on the 3D printing of zirconia and silicon nitride by stereolithography (Invited)**J. Zhang*¹

1. Shanghai Institute of Ceramics Chinese Academy of Sciences, China

GFMAT-3 Symposium 3- Novel, Green, and Strategic Processing and Manufacturing Technologies**GFMATS3- Novel, Green, and Strategic Processing and Manufacturing Technologies I**

Room: Sandpiper D

Session Chairs: Tatsuki Ohji, Yokohama Kokuritsu Daigaku; Ivar Reimanis, Colorado School of Mines

8:30 AM**(GFMAT-S3-001-2026) How sintering mechanisms impact novel sintering methods (Invited)**S. J. Dillon*¹

1. University of California, Irvine, USA

9:00 AM**(GFMAT-S3-002-2026) Operando observation using an OCT-TG-FTIR-MS combined system for understanding dewaxing process and green manufacturing (Invited)**J. Tatami*¹; F. Kimura¹; M. Iijima²

1. Yokohama National University, Japan
2. Yokohama National University, Graduate School of Environment and Information Sciences, Japan

9:30 AM**(GFMAT-S3-003-2026) Optical single crystals, growth and characteristics (Invited)**K. Shimamura*¹; E. G. Villora¹

1. National Institute for Materials Science (NIMS), Japan

10:00 AM

Break

10:20 AM**(GFMAT-S3-004-2026) Fabrication of high-nitrogen-content silicon oxynitride glasses and their physical properties (Invited)**H. Segawa*¹

1. Busshitsu Zairyo Kenkyu Kiko, Japan

10:50 AM**(GFMAT-S3-005-2026) The industrial relevance of advanced sintering technology: Field assisted sintering**J. Rufner*¹; A. Gorman¹; X. Zhang¹; A. Preston¹

1. Idaho National Lab, Materials Science and Manufacturing, USA

11:10 AM**(GFMAT-S3-006-2026) Controlled crystallographic orientation and fabrication of transparent lanthanum silicate apatite phosphor using high magnetic field and SPS**T. S. Suzuki*¹; H. Ariga²; A. Kawamura²; K. Kobayashi¹; H. Kiyono²

1. National Institute for Materials Science, Optical Ceramics Group, Japan
2. Shibaura Kogyo Daigaku, Japan

11:30 AM**(GFMAT-S3-007-2026) Recent progress of silicon nitride ceramics**T. Ohji*¹; J. Tatami¹

1. Yokohama National University, Japan

GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications**GFMAT-S6- Na-ion battery and Supercapacitor**

Room: Tidepool 1

Session Chairs: Bruce Dunn, UCLA; Matteo Bianchini, Universitat Bayreuth Fakultat fur Biologie Chemie Geowissenschaften

9:00 AM**(GFMAT-S6-024-2026) Development of positive and negative electrode materials Na-ion batteries (Invited)**M. Xu¹; G. Gammaitoni¹; M. Bianchini*¹

1. Universitat Bayreuth Fakultat fur Biologie Chemie Geowissenschaften, Germany

9:30 AM**(GFMAT-S6-025-2026) Development of cost-effective and high-energy cathodes for sodium-ion battery (Invited)**H. Kobayashi*¹

1. Hokkaido University, Japan

10:00 AM**Break****10:20 AM****(GFMAT-S6-026-2026) Sodium-Ion electrodes based on induced pseudocapacitive behavior (Invited)**Q. Nguyen¹; A. Zambotti¹; B. Dunn*¹

1. UCLA, Materials Science and Engineering, USA

10:50 AM**(GFMAT-S6-027-2026) Systematic phase modulation in Na_{0.8}(Mn-Fe-Ni)O₂ system for high energy density & structural stability**S. Saxena*¹; N. Dagar¹; S. Kumar¹

1. Indian Institute of Technology Indore, India

GFMAT-3 Symposium 10- Materials Recycling for Energy and Environment Applications**GFMAT-S10- Recycling**

Room: Sandpiper C

Session Chairs: Madhusoodana C D, Bharat Heavy Electricals Limited; Maharshi Dey, UbiQD, Inc.; Shibayan Roy, Indian Institute of Technology Kharagpur

8:30 AM**(GFMAT-S10-009-2026) Next-generation photovoltaic module recycling via selective interfacial heating and design-for-disassembly (Invited)**C. Tokoro*¹

1. Waseda University, Japan

9:00 AM**(GFMAT-S10-010-2026) Recycling DLP-3D printed green bodies: Disassembling and powder reuse to photocurable suspensions (Invited)**M. Iijima*¹; Y. Hiroshige¹; N. Morimoto¹; J. Tatami¹

1. Yokohama National University, Japan

9:30 AM**(GFMAT-S10-011-2026) Polymer-derived ceramic coatings on zirconia microspheres via rotating flow fluid dynamics and pyrolysis (Invited)**K. Lu*¹; N. Ravi¹; K. Behera¹

1. University of Alabama at Birmingham, USA

10:00 AM**Break****10:20 AM****(GFMAT-S10-012-2026) Novel low-temperature chemical densification process for ceramics considering material recycling (Invited)**Y. Yamaguchi*¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Japan

10:50 AM**(GFMAT-S10-013-2026) Chemithermal pulverization: A potential technique for ceramics recycling (Invited)**H. Segawa²; N. Ohashi*^{2,1}

1. Institute of Science Tokyo, MDX Research Center for Elemental Strategy, Japan
2. National Institute for Materials Science (NIMS), Japan

11:20 AM**(GFMAT-S10-014-2026) Enhancing citric acid solubility and mitigating heavy metal contamination in sewage sludge incineration ash for high-quality fertilizer production**H. Kamiya*¹; X. Hao¹; Z. Kun¹; S. Oleszek¹; H. Iwai¹; M. Ito²; K. Fujimori²; Y. Iwai²;R. Tsujibayashi²; C. Tokoro¹

1. Waseda University, Japan
2. Sanki Engineering Co Ltd, Japan

11:40 AM**(GFMAT-S10-015-2026) A novel interfacial separation method for rubber-metal composites recycling using liquid nitrogen cooling and its mechanism**M. Sayama*³; A. Narita¹; T. Nishioka²; A. Mase²; C. Tokoro^{1,4}

1. Waseda University, Faculty of Science and Engineering, Japan
2. Sumitomo Riko Company Limited, Japan
3. Waseda University, Graduate School of Creative Science and Engineering, Japan
4. The University of Tokyo, Faculty of Engineering, Japan

12:00 PM**PPP- Grain-scale fracture resistance in silicon nitride ceramics measured using microcantilever specimens****GFMAT-3 Symposium 11- Ceramics and Glasses for Bio-Medical Applications****GFMAT-S11- Ceramics and Glasses for Bio-Medical Applications**

Room: Sandpiper A

Session Chair: Katalin Balazsi, Centre for Energy Research HAS

10:20 AM**(GFMAT-S11-001-2026) Respiratory infection single exhale (RISE) breath test (Invited)**P. Gouma*¹

1. The Ohio State University, MSE, USA

10:50 AM**(GFMAT-S11-002-2026) Decomposition of luminescent hydroxyapatite scaffolds in simulated body fluid (Invited)**O. A. Graeve^{*}; F. Martinez-Pallares¹; M. Herrera²

1. University of California, San Diego, Mechanical and Aerospace Engineering, USA
2. Universidad Nacional Autonoma de Mexico, Centro de Nanociencias y Nanotecnologia, Mexico

11:20 AM**(GFMAT-S11-003-2026) DNaPatite: An elastic apatite with sub-nanometer scale organo-inorganic structures (Invited)**J. Lee^{*}

1. Sungkyunkwan University, Advanced Materials Science & Engineering, Republic of Korea

Young Professionals Forum**HTCMC-GFMAT- YPF-Novel Ceramic Processing I**

Room: Sandpiper B

Session Chairs: Alex Leide, UKAEA; Yuki Nakashima, National Institute of Advanced Industrial Science and Technology (AIST)

8:30 AM**(YPF-007-2026) Developing a hybrid route for next-generation ceramic matrix composites (Invited)**V. Venkatachalam^{*}; J. Binner²

1. University of Birmingham, Metallurgy and Materials, United Kingdom
2. University of Birmingham, Ceramic Science & Engineering, United Kingdom

9:00 AM**(YPF-011-2026) Effect of cellulose-nano-fiber addition on the rheology properties of ceramic paste for extrusion-based additive manufacturing (Invited)**Y. Chung^{*}; A. Shimamura¹; N. Kondo¹; M. Hotta¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Japan

9:30 AM**(YPF-009-2026) Unlocking the potential of microwave heating for advanced ceramics and composites processing (Invited)****WITHDRAWN**R. D'Ambrosio^{*}; A. Cintio¹; A. Lazzeri^{2,1}; G. Annino³

1. Istituto per i Processi Chimico-Fisici Consiglio Nazionale delle Ricerche, Italy
2. University of Pisa, Department of Civil and Industrial Engineering, Italy
3. Istituto per i Processi Chimico-Fisici Consiglio Nazionale delle Ricerche Sede Secondaria di Pisa, Dipartimento di Scienze Chimiche e Tecnologie dei Materiali, Italy

10:00 AM**Break****HTCMC-GFMAT-YPF- Novel Ceramic Processing II**

Room: Sandpiper B

Session Chair: Yuki Nakashima, National Institute of Advanced Industrial Science and Technology (AIST)

10:20 AM**(YPF-010-2026) Advanced metal oxide nanoparticles with hierarchical nanostructures: Novel synthesis and applications in catalysis and sensors (Invited)**T. Fuchigami^{*}

1. Sangyo Gijutsu Sogo Kenkyujo Tsukuba Chuo Jigyosho, Japan

10:50 AM**(YPF-008-2026) SiC_f/SiC composites made by conventional and particle enhanced polymer infiltration pyrolysis (Invited)**C. Akaoglu¹; J. Lao¹; Q. Zhang¹; P. Withers¹; P. Xiao¹; D. Scotson^{*}

1. The University of Manchester, Materials, United Kingdom
2. University of Bristol, Physics, United Kingdom

11:20 AM**(YPF-012-2026) Wet filament winding of non-oxide ceramic matrix composites**P. Patel^{*}

1. University of Bristol, United Kingdom

11:40 AM**PPP- Low-cost, high-volume manufacture of oxide based CMCs****HTCMC-12 Symposium 2- Fibers, Preforms, and Interphases****HTCMCS2- The Effects of Fiber and Preform Properties on the Thermal Behavior of CMCs**

Room: Shorebreak 1

Session Chair: Jonathan Maier

8:30 AM**(HTCMC-S2-001-2026) High-temperature performance of SiC fibers and the role of interphases in ceramic-matrix composite fracture (Invited)**K. Shimoda^{*}; H. Katsui²

1. National Institute for Materials Science (NIMS), Research Center for Structural Materials, Japan
2. National Institute of Advanced Industrial Science and Technology (AIST), Multi-Material Research Institute, Japan

9:00 AM**(HTCMC-S2-002-2026) Effect of through thickness Stitching of 2D preforms on the thermomechanical properties of C/SiC composites (Invited)**C. Sauder^{*}; t. courtellemont¹; M. Bornert²; p. aimedieu²

1. Commissariat a l'energie atomique et aux energies alternatives Centre de Saclay Bibliotheque, SRMA, France
2. Ecole nationale des ponts et chaussees, France

9:30 AM**(HTCMC-S2-003-2026) Emerging SiC fiber and mini-composite with superior thermal stability and creep resistance**M. Sumino^{*}; T. Matsunaga¹

1. UBE Kabushiki Kaisha, Specialty Products Division, Japan
2. UBE Kabushiki Kaisha, Research & Development, Japan

9:50 AM**(HTCMC-S2-004-2026) Effects of matrix composition on the thermal stability and grain growth kinetics of alumina-based fibers**R. S. Almeida^{*}; K. Tushev¹; K. Rezwan¹

1. University of Bremen, Germany

10:10 AM**Break****HTCMCS2- Properties and New Developments in Interfaces/Interphases**

Room: Shorebreak 1

Session Chair: Cédric Sauder, CEA

10:30 AM**(HTCMC-S2-005-2026) In-situ observation of micro-cracking in SiC/SiC ceramic matrix composites (Invited)**T. Sekigawa^{*}; Y. Tanaka¹; M. Takeda¹

1. Tokyo University of Technology, Japan

11:00 AM**(HTCMC-S2-006-2026) The evolution of the fiber matrix bonding strength during CMC processing – Single fiber push-out tests in CFRP, C/C and C/C-SiC state**F. Wich^{*}; N. Langhof¹; S. Schafföner¹

1. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany

11:20 AM**(HTCMC-S2-007-2026) CVI-controlled growth and characterization of a 3D-architected BN interphase**A. Mounérat^{*1}; H. Plaisantin²; S. Jacques³; G. Chollon³

1. SAFRAN Ceramics, LCTS, University of Bordeaux, France
2. SAFRAN Ceramics, LCTS, France
3. CNRS, LCTS, University of Bordeaux, France

11:40 AM**(HTCMC-S2-008-2026) Tailored interphases and UHTC coatings by laser-assisted chemical vapor deposition**H. Katsui^{*1}; K. Shimoda²; M. Hotta¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Multi-Material Research Institute, Japan
2. National Institute for Materials Science (NIMS), Research Center for Structural Materials, Japan

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites

HTCMCS4- Oxide-based composites

Room: Silver Pearl 1

Session Chair: Matthew Dickerson, Air Force Research Laboratory

8:30 AM**(HTCMC-S4-027-2026) Fracture mechanism of oxide fiber reinforced oxide matrix composites at room temperature and high temperature (Invited)**H. Kakisawa^{*1}

1. Busshitsu Zairyo Kenkyu Kiko, Japan

9:00 AM**(HTCMC-S4-028-2026) Blind machining of a 2D woven oxide-oxide ceramic matrix composite using abrasive waterjet process**M. Latour^{*1}; L. Crouzeix¹; C. Morel¹; G. Dusserre¹; R. Zitoune¹; T. Cutard¹; J. Malenfant²

1. Institut Clement Ader, France
2. Safran Ceramics, France

9:20 AM**(HTCMC-S4-029-2026) Thermal control of slurry infiltration and tow impregnation in oxide ceramic matrix composites**E. Valenzuela-Heeger^{*1}; J. Binner²

1. University of Birmingham, Metallurgy and Materials, United Kingdom
2. University of Birmingham, Ceramic Science & Engineering, United Kingdom

HTCMCS4- Advanced processing and manufacturing technologies III/ SiC-based composites III

Room: Silver Pearl 1

Session Chair: Gerard Vignoles, University Bordeaux

9:40 AM**(HTCMC-S4-030-2026) Effect of membrane pressure application timing on slurry transfer molding of SiC/SiC parts**M. Dias¹; N. Eberling-Fux²; L. Laberge Lebel^{*1}

1. Polytechnique Montreal, Canada
2. Safran Ceramics, France

10:00 AM**Break****10:20 AM****(HTCMC-S4-031-2026) Hybrid post-processing to suppress porosity growth during crystallization of PIP-derived C_f/SiC**K. T. Nguyen^{*1}; S. Nutt³; E. J. Pope²

1. University of Southern California, Aerospace Mechanical Engineering, USA
2. MATECH, USA
3. University of Southern California, USA

10:40 AM**(HTCMC-S4-032-2026) High-solid-loading ceramic slurry infiltration process for high-temperature structural ceramic composites**S. Jung^{*1,2}; M. Park^{1,2}; W. Kwon¹; S. Lee²

1. Korea Institute of Materials Science, Republic of Korea
2. Korea Institute of Materials Science, Extreme Materials Research Institute, Republic of Korea

11:00 AM**(HTCMC-S4-033-2026) Development of pre-impregnated carbon fiber tapes using PVA and PVA-PEG aqueous solutions**J. Gilder^{*1,2}; A. Capehart³; C. Clarkson²; K. E. Copenhaver⁴; A. Hubbard²; E. Krist²; C. L. Cramer⁴; D. Gilmer³

1. The University of Tennessee Knoxville Tickle College of Engineering, Aerospace, USA
2. Oak Ridge National Laboratory, USA
3. The University of Tennessee Knoxville Tickle College of Engineering, MSE, USA
4. Oak Ridge National Lab, Manufacturing Science Division, USA

11:20 AM**(HTCMC-S4-034-2026) Drying control for scaling aqueous ceramic slurry material extrusion geometries**A. Gourley^{*1,2}; C. Wyckoff¹; J. Kaufman^{3,1}; J. Hardin¹; L. M. Rueschhoff⁴

1. Air Force Research Laboratory, Materials and Manufacturing Directorate, USA
2. National Academies of Sciences Engineering and Medicine, USA
3. UES, Inc., USA
4. Air Force Research Lab, Materials and Manufacturing Directorate, USA

11:40 AM**(HTCMC-S4-035-2026) Advanced routes for manufacturing high performance CMCs**C. Akaoglu^{*1}; A. Dobosz¹; G. Jones¹; V. Rubio¹

1. Lucideon Ltd, Advanced Materials, United Kingdom

HTCMC-12 Symposium 5- Advanced Thermal and Environmental Barrier Coating – Processing, Properties, and Applications

HTCMCS5- Thermal and environmental barrier coatings for CMCs

Room: Silver Pearl 2/3

Session Chair: Elizabeth Opila, University of Virginia

8:30 AM**(HTCMC-S5-009-2026) Advanced design of high-temperature-stable and radiation-efficient T/EBC systems using machine learning (Invited)**M. Tanaka^{*1}; N. Kawashima¹; T. Ogawa¹; T. Ito¹; K. Nakayama¹; T. Kato¹; N. Yamaguchi¹; H. Suzuki²; H. Shibata²; A. Kawasaki²; S. Kitaoka^{1,3}

1. Japan Fine Ceramics Center, Japan
2. Japan AeroSpace Technology Foundation, Japan
3. Tokyo University of Technology, Japan

9:00 AM**(HTCMC-S5-010-2026) Dense and pure ytterbium disilicate environmental barrier coating as protection of SiC against oxidation**G. Sève^{*1}; F. Rebillat²; S. Jacques³

1. Laboratoire des Composites Thermostructuraux, Safran Ceramics, University of Bordeaux, France
2. Laboratoire des Composites Thermostructuraux, University of Bordeaux, France
3. Laboratoire des Composites Thermostructuraux, CNRS, France

9:20 AM**(HTCMC-S5-011-2026) Characterising boron diffusion into silicon bond coats for environmental barrier coatings**D. Scotson^{*1}; A. Paksoy¹; K. Li¹; E. Yilmaz¹; K. Moore¹; P. Xiao¹

1. The University of Manchester, Department of Materials, United Kingdom

9:40 AM**(HTCMC-S5-012-2026) Ultrafast fabrication of high-temperature resistant Si–Al–C–N ceramic coatings from single source precursors**

A. D. Camacho Ramirez^{*1}; M. Boroojerdi¹; L. Korell²; G. Falcão³; M. C. Galetz²; M. Heilmaier²; E. Ionescu⁴; R. Riedel¹

1. Technische Universität Darmstadt Fachbereich Material- und Geowissenschaften, Germany
2. DECHEMA Gesellschaft für Chemische Technik und Biotechnologie eV, High Temperature Materials, Germany
3. Karlsruher Institut für Technologie, Institute for Applied Materials (IAM-WK), Germany
4. Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung eV, Fraunhofer Research Institution for Materials Recycling and Resource Strategies IWKS, Germany

10:00 AM**Break****10:20 AM****(HTCMC-S5-013-2026) Porosity dependence of molten sand wetting and infiltration in oxide ceramics**

A. Wright^{*1}; T. Sharobem²; C. Dambra²; B. Keyes²; A. Ghoshal¹

1. US Army Combat Capabilities Development Command Army Research Laboratory Aberdeen Proving Ground, USA
2. Oerlikon Metco US Inc, USA

HTCMCS5- Advanced testing and non-destructive evaluation methodologies

Room: Silver Pearl 2/3

Session Chair: Elizabeth Opila, University of Virginia

10:40 AM**(HTCMC-S5-015-2026) Optical diagnostics of CMAS infiltration into environmental barrier coatings with spectroscopic ellipsometry and high temperature spectral pyrometry**

E. S. Golightly^{*1}; L. A. Doumaux²; G. Harrington⁴; R. Golden⁴; A. L. Chamberlain⁴; E. J. Opila²; P. E. Hopkins²

1. University of Virginia, Mechanical and Aerospace Engineering, USA
2. University of Virginia, USA
3. University of Virginia, Materials Science and Engineering, USA
4. Rolls Royce, USA

11:20 AM**PPP- Thermal and Radiative Heat Transport in Gd₂Zr₂O₇ for Thermal Barrier Coating Applications: A First-Principles Study****HTCMC-12 Symposium 7- Materials for Extreme Environments – UHTCs, MAX phases, and nanolaminates****HTCMCS7- Response of UHTCs/UHTCMCs in Extreme Environments II**

Room: Osprey

Session Chair: Theresa Davey, Bangor University

8:30 AM**(HTCMC-S7-030-2026) Eutectics observed in Group (IV,V) binary transition metal diboride (Invited)**

S. Ness³; A. N. Dörner²; W. Rosenberg³; P. Spencer⁴; G. Hillmas²; W. Fahrenholtz²; S. J. McCormack^{*1}

1. University of California Berkeley, Materials Science and Engineering, USA
2. Missouri University of Science & Technology, Dept. of Materials Science and Engineering, USA
3. University of California Davis, Chemical Engineering, USA
4. The Spencer Group Inc, USA

9:00 AM**(HTCMC-S7-031-2026) Uncovering the spectral emissivity of transition metal carbides at ultrahigh temperatures**

H. B. Schonfeld^{*4}; W. Hutchins⁴; M. Milich⁴; C. Stephens^{1,2}; L. Backman³; E. Opila^{1,4}; P. E. Hopkins⁴

1. University of Virginia, Material Science and Engineering, USA
2. Johns Hopkins University Applied Physics Laboratory, USA
3. U.S. Naval Research Laboratory, Spacecraft Engineering Division, USA
4. University of Virginia, Mechanical and Aerospace Engineering, USA

9:20 AM**(HTCMC-S7-032-2026) Influence of the state and quantity of oxygen on the oxidation mechanisms of a ZrB₂-ZrC-SiC system under high flux conditions**

R. Beringue^{*1}; L. Maillé¹; A. Quet²; V. Genissel²; L. Charpentier³; T. Archer⁴; J. Braun^{2,1}; F. Rebillat¹

1. Laboratoire des Composites Thermostructuraux, France
2. Commissariat à l'énergie atomique et aux énergies alternatives Direction des applications militaires Le Ripault, France
3. Laboratoire Procédés Matériaux et Énergie Solaire, France
4. Office National d'Études et de Recherches Aéronautiques, France

HTCMCS7- Response of UHTCs/UHTCMCs in Extreme Environments III

Room: Osprey

Session Chair: Scott McCormack, University of California Berkeley

9:40 AM**(HTCMC-S7-033-2026) Recent developments and characterization of ultra-refractories for harsh environments**

J. Justin^{*1}; A. Julian Jankowiak¹; L. Sevin¹; A. DeBarre¹

1. Office National d'Études et de Recherches Aéronautiques, DMAS, ONERA, Université Paris-Saclay, France

10:00 AM**Break****10:20 AM****(HTCMC-S7-034-2026) From prediction to proof: Zirconium carbonitrides with near-record melting temperatures**

H. B. Schonfeld^{*1}; Q. Hong²; I. M. Hawthorne³; S. Ryu¹; D. Fisher²; J. Matteucci⁴; S. Ushakov⁴; A. Campbell²; H. Xu²; P. E. Hopkins^{1,2}; E. J. Opila^{3,1}; A. Navrotsky⁴

1. University of Virginia, Mechanical and Aerospace Engineering, USA
2. Arizona State University, School for Engineering of Matter, Transport, and Energy, USA
3. University of Virginia, Material Science and Engineering, USA
4. Arizona State University, School of Molecular Sciences, USA

10:40 AM**(HTCMC-S7-035-2026) Synthesis and characterization of 2.5D C/SiC composites with SiC/ZrB₂/SiC modified matrix for ultra high temperature applications**

J. D. W^{*1}; U. Andi²; M. S¹

1. Anna University, Department of Ceramic Technology, India
2. CSIR National Aerospace Laboratories, Materials Science Division, India

11:00 AM**(HTCMC-S7-036-2026) Effect of SiC content on the densification, mechanical properties, and ablation response of HfC-SiC-TaC UHTCs**

N. L. Serrano^{*1}; C. T. Doolittle¹; A. Ghoshal²; S. D. Walck²; L. Vargas-Gonzalez²; M. L. Young¹; A. Voevodin¹; S. Aouadi¹

1. University of North Texas College of Engineering, Materials Science and Engineering, USA
2. US Army Research Laboratory, USA

GFMAT-3 Symposium 2- Functional Nanomaterials for Sustainable Energy Technologies**GFMATS2- Metal oxide nanostructures for sensing, batteries, and water splitting applications**

Room: Sandpiper C

Session Chair: Donglu Shi, University of Cincinnati

1:30 PM**(GFMAT-S2-001-2026) Plasma-driven engineering of functional oxides for photonic and energy applications (Invited)**

M. Chaker^{*1}

1. Institut national de la recherche scientifique, Énergie matériaux télécommunications, Canada

2:00 PM**(GFMAT-S2-002-2026) Hybridization of graphene and molybdenum oxide with the field-effect transistor for volatile organic compound gas sensing**O. Okanishi*¹; A. Katsura¹; Y. Hirose¹; N. Nagamura³; T. Ono²; T. Uemura²; T. Sugahara¹

1. Kyoto Kogei Sen'i Daigaku, Japan
2. Osaka Daigaku, Japan
3. Busshitsu Zairyo Kenkyu Kiko, Japan

GFMATS2- Nanomaterials for energy conversion, storage, and catalysis

Room: Sandpiper C

Session Chair: Giovanni Fanchini, University of Western Ontario

2:20 PM**(GFMAT-S2-003-2026) Rational Design of Perovskite Oxide Catalysts for Efficient CO₂ Methanation (Invited)**B. Koo*¹

1. Sungshin Women's University, School of Chemistry and Energy, Republic of Korea

2:50 PM**Break****3:10 PM****(GFMAT-S2-004-2026) Solar photothermal energy generation through multiple transparent Fe₃O₄-Cu_{2-x}S thin films for building utility heating (Invited)**D. Shi*¹; M. Gandharapu¹; A. Katepalli¹; A. Harfmann²; M. Bonmarin³; J. Krupczak⁴

1. University of Cincinnati, Mechanical and Materials Engineering, USA
2. University of Cincinnati, Architectural Engineering, USA
3. ZHAW Zürcher Hochschule für Angewandte Wissenschaften, Engineering, Switzerland
4. Hope College, Engineering, USA

GFMATS2- Transition metal chalcogenides, carbon nanostructures, 2D materials

Room: Sandpiper C

Session Chair: Alberto Vomiero, Lulea University of Technology

3:40 PM**(GFMAT-S2-007-2026) How to not make high temperature ceramics: The curious case of 2D auxetic semicarbides (Invited)**G. Fanchini*¹

1. University of Western Ontario, Physics and Astronomy, Canada

GFMAT-3 Symposium 3- Novel, Green, and Strategic Processing and Manufacturing Technologies**GFMATS3- Novel, Green, and Strategic Processing and Manufacturing Technologies II**

Room: Sandpiper D

Session Chairs: Tohru Suzuki, National Institute for Materials Science; Shen Dillon, University of California, Irvine

1:30 PM**(GFMAT-S3-008-2026) Clay-based ceramics for hydrogen production and gas separation (Invited)**I. Reimanis*¹; O. Olaleye¹; R. McGinnis¹; S. Ricote²; G. Coors³; R. Marder⁴; W. D. Kaplan⁴

1. Colorado School of Mines, Metallurgical and Materials Engineering, USA
2. Colorado School of Mines, Mechanical Engineering, USA
3. Hydrogen Helix, USA
4. Technion - Israel Institute of Technology, Dept. of Materials Science and Engineering, Israel

2:00 PM**(GFMAT-S3-009-2026) Immobilization of laccases on CuO and ZnO nanoparticles: Enhanced stability and catalytic performance for water bioremediation applications (Invited)**O. A. Graeve*¹; F. Suarez²; R. Vazquez-Duhalt²

1. University of California, San Diego, Mechanical and Aerospace Engineering, USA
2. Universidad Nacional Autonoma de Mexico, Centro de Nanociencias y Nanotecnologia, Mexico

2:30 PM**(GFMAT-S3-010-2026) Lignin-based polymer precursors for advanced ceramic systems (Invited)**D. Gilmer*^{1,2}; R. Walker¹; J. Fischer¹; J. Brown¹; T. Nelson³; D. Harper¹

1. The University of Tennessee Knoxville Tickle College of Engineering, Material Science and Engineering, USA
2. Oak Ridge National Laboratory Energy Science and Technology Directorate, USA
3. University of Tennessee Oak Ridge Innovation Institute, USA

3:00 PM**Break****3:20 PM****(GFMAT-S3-011-2026) 3D printable ceramics from glass and pre-ceramic polymers: From molecular design to additive manufacturing (Invited)**M. Sobczak¹; K. Song*¹

1. University of Georgia, Mechanical Engineering, USA

3:50 PM**(GFMAT-S3-012-2026) Binder Jet additive manufacturing of recycled glass to form trim tools**T. Prum*¹; D. Gilmer¹; A. Stiles²; R. Walker¹

1. The University of Tennessee Knoxville Tickle College of Engineering, Materials Science and Engineering, USA
2. Vitriform3D, USA

4:10 PM**(GFMAT-S3-013-2026) Hydrothermal processing of nanostructured oxide coatings for self-cleaning surfaces**J. Cho*¹

1. Binghamton University, Mechanical Engineering and MSE, USA

4:30 PM**(GFMAT-S3-014-2026) Design at nanoscale of thermostable hybrid sol-gel bondlayer to functionalize aeronautical CFRP by thermal spray**S. Senani - de Monredon*¹; L. Rozes²; A. Joulia³; G. Penvern⁴

1. Safran Electronics & Defense Massy, Head of Operations Dpt, France
2. Sorbonne Universite, LCMCP, France
3. Safran Tech, PFX, France
4. Safran Tech, Composites, France

GFMAT-3 Symposium 6- Advanced Batteries and Supercapacitors for Energy Storage Applications

GFMAT-S6- New and Emerging Electrochemistry

Room: Tidepool 1

Session Chairs: Vallabha Rao Rikka, Underwriters Laboratories Inc; Palani Balaya, National University of Singapore

1:30 PM

(GFMAT-S6-029-2026) High-capacity intercalation-type cathode materials using anionic redox for all-solid-state fluoride-ion batteries (Invited)

K. Yamamoto*¹

1. Nara Women's University, Japan

2:00 PM

(GFMAT-S6-030-2026) Accelerating the development of high-performance battery materials through human-in-the-loop active learning and generative design (Invited)

I. Park*¹

1. Daegu Gyeongbuk Institute of Science & Technology, Department of Energy Science and Engineering, Republic of Korea

2:30 PM

(GFMAT-S6-031-2026) Electrolyte design for Li metal batteries: Toward improving cycle stability (Invited)

M. Kim*¹

1. Kwangwoon University, Republic of Korea

3:00 PM

Break

3:20 PM

(GFMAT-S6-032-2026) Binder-enabled solvation control suppresses SEI invasion in silicon anodes (Invited)

V. Rikka*¹; W. Tang¹; J. Jeevarajan¹

1. Underwriters Laboratories Inc, Electrochemical Safety Research Institute, USA

3:50 PM

(GFMAT-S6-033-2026) Phosphorus doping led improvement on the electrochemical property of rGO with SiO_x composite as anode material for lithium-ion battery (Invited)

J. Huang*¹

1. National Cheng Kung University, Materials Science and Engineering, Taiwan

4:20 PM

(GFMAT-S6-034-2026) Ceria-carbonate heterostructure reinforced PBI composite membranes for enhanced performance and durability in high-temperature PEM fuel cells (Invited)

P. Singh*¹

1. Indian Institute of Technology(BHU), Physics, India

GFMAT-3 Symposium 11- Ceramics and Glasses for Bio-Medical Applications

GFMAT11- Ceramics and Glasses for Bio-Medical Applications

Room: Sandpiper A

Session Chairs: Pelagia-Irene Gouma, The Ohio State University; Cristina Balagna, Politecnico di Torino

1:30 PM

(GFMAT-S11-004-2026) Design of calcium phosphate invert glasses for biomedical applications (Invited)

S. Lee*¹

1. National Institute of Advanced Industrial Science and Technology (AIST), Japan

2:00 PM

(GFMAT-S11-005-2026) Sustainable antimicrobial composite coatings for air filtration and biomedical applications (Invited)

C. Balagna*¹; A. Luceri²; F. Gattucci²; M. Donalisio²; D. Lembo²; M. Ferraris³

1. Politecnico di Torino, Dept. Applied Science and Technology, Italy
2. Politecnico di Torino, DISAT, Italy
3. Politecnico di Torino, Department of Applied Science and Technology, Italy
4. Università degli Studi di Torino, Italy

2:30 PM

(GFMAT-S11-006-2026) Ceramic-polymer composites – different manufacturing approaches but the same goal to regenerate bone and osteochondral tissue defects (Invited)

E. Pamula*¹

1. AGH University of Krakow, Faculty of Materials Science and Ceramics, Department of Biomaterials and Composites, Poland

3:00 PM

Break

3:20 PM

(GFMAT-S11-007-2026) Coacervate-hydroxyapatite hybrids for bone repair (Invited)

J. J. Chung*^{1,2}

1. Seoul National University Hospital, Transdisciplinary Medicine, Republic of Korea
2. Seoul National University College of Medicine, Medicine, Republic of Korea

3:50 PM

(GFMAT-S11-008-2026) Evaluation of amorphization mechanism of β -tricalcium phosphate by bead milling

Y. Tsuji*^{1,2}; M. Sakurai²; T. Kasuga³; F. Nagata¹; S. Lee¹

1. Sangyo Gijutsu Sogo Kenkyujo Chubu Center, Japan
2. Chubu Daigaku, Department of Applied Chemistry, Japan
3. Nagoya Kogyo Daigaku, Japan

4:10 PM

(GFMAT-S11-009-2026) Cytocompatibility evaluation of PVDF-(Na,K)NbO₃ composite fibers for neural tissue engineering applications

T. Nafis*¹

1. Indian Institute of Technology BHU Varanasi I-DAPT HUB Foundation, CERAMIC DEPARTMENT, India

Young Professionals Forum

HTCMC-GFMAT-YPF- Non-destructive testing

Room: Sandpiper B

Session Chairs: Jing Liu, University of Alberta; N. Ahmad

1:30 PM

(YPF-013-2026) Real-time monitoring of ceramic sintering and high-temperature behavior via the impulse excitation technique (Invited)

P. Springer Simonova*^{1,2}; E. Gregorova²; W. Pabst²; N. Langhof¹; S. Schafföner¹

1. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany
2. University of Chemistry and Technology, Prague, Department of Glass and Ceramics, Czechia

2:00 PM

(YPF-014-2026) Synchrotron X-ray multiscale tomography for revealing heterogeneous microstructures and defects in ceramics (Invited)

G. Okuma*¹

1. Busshitsu Zairyo Kenkyu Kiko, Japan

HTCMC-12 Symposium 1- Computational Modeling and Design of New Materials and Processes

HTCMCS1- Computation of mechanical, thermal and thermomechanical properties I

Room: Osprey

Session Chairs: Frank Zok, University of California Santa Barbara
College of Engineering; Dong Liu, University of Oxford

1:30 PM

(HTCMC-S1-001-2026) Spatial autocorrelation of fiber fracture in ceramic composites: Theory and practice (Invited)

F. W. Zok^{*1}; N. Han²

1. University of California Santa Barbara College of Engineering, Materials, USA
2. UCSB, Materials, USA

2:00 PM

(HTCMC-S1-002-2026) A subvolume homogenisation framework to determine thermo-mechanical properties of SiC/BN/SiC CMCs

A. Soni^{*1}; P. Foster¹; V. Dubey¹; L. Kawashita¹; G. Allegri¹; S. Hallett¹

1. University of Bristol, Civil aerospace and design engineering, United Kingdom

2:20 PM

(HTCMC-S1-003-2026) Characterization of CVI-SiC CMC microstructures using xCT CNN segmentation

B. Lenz^{*1}

1. Pratt & Whitney, USA

2:40 PM

(HTCMC-S1-004-2026) Determination of the mechanical properties of 2D woven plies in ultra-high temperature ceramic composites

T. Rumen^{*1,2}; A. Este¹; M. Montemurro^{3,5}; A. Cosculluela¹; M. Bouchez¹; A. Catapano^{5,2}

1. Commissariat à l'énergie atomique et aux énergies alternatives Centre d'études scientifiques et techniques d'Aquitaine, France
2. Institut de Mécanique et d'Ingénierie, France
3. Ecole Nationale Supérieure d'Arts et Métiers, France
4. MBDA France SAS, France
5. Institut Universitaire de France, France
6. Bordeaux INP, France

3:00 PM

Break

HTCMCS1- Computation of mechanical, thermal and thermomechanical properties II

Room: Osprey

Session Chair: Frédéric Laurin, ONERA

3:20 PM

(HTCMC-S1-005-2026) An embedded-fiber approach to modeling the non-linear behavior of ceramic-matrix composites (Invited)

G. Couégnat^{*1}; A. Vassalié^{1,2}; C. Le Bras¹; S. Denneulin²

1. Laboratoire des Composites Thermostructuraux, France
2. Safran SA, CERAMICS, France

3:50 PM

(HTCMC-S1-006-2026) In situ CT-Scan observation and modelling of damage in oxide/oxide composites (Invited)

F. Laurin^{*1}; T. Drouin²; F. Guillet²; A. Sauvet²; G. Couégnat³

1. ONERA, Paris-Saclay University, DMAS, France
2. Commissariat à l'énergie atomique et aux énergies alternatives Siege administratif, CEA Le Ripault, France
3. Laboratoire des Composites Thermostructuraux, France

4:20 PM

(HTCMC-S1-007-2026) Benchmark of 2D woven carbon-fiber composites constitutive models with respect to notched plate tests

M. Guiho^{*1}; J. Bénézech²; C. Léger²; A. Derrien¹; J. Maire²; F. Laurin²

1. MBDA Holding SAS, France
2. Office National d'Etudes et de Recherches Aérospatiales, DMAS, ONERA, Université Paris-Saclay, France

4:40 PM

(HTCMC-S1-008-2026) A multiscale modelling framework for mechanical, temperature and oxidation-dependent behaviour of SiC/BN/SiC CMCs

V. Dubey^{*1}; P. Foster¹; A. Soni¹; L. Kawashita¹; G. Allegri¹; S. Hallett¹

1. University of Bristol, Aerospace Engineering, United Kingdom

5:00 PM

(HTCMC-S1-009-2026) Pyrolytic carbons: Structure-mechanical properties relationships studied by modeling and experiments

J. Leyssale²; B. Farbos¹; M. Lalanne³; F. Polewczyk^{2,3}; P. Aurel²; P. Weisbecker²; J. Da Costa⁴; P. Lafourcade³; A. Bident¹; G. Chollon²; S. Jacques⁵; S. Jouannigot²; G. Couégnat²; G. L. Vignoles^{*1}

1. University Bordeaux, LCTS - Lab for ThermStructural Composites, France
2. CNRS, ISM - Inst. Sciences Moléculaires, U. Bordeaux, France
3. Commissariat à l'énergie atomique et aux énergies alternatives Siege administratif, DPTA, France
4. Bordeaux Sciences Agro, IMS - Insitute from Materials to Systems, U. Bordeaux, France
5. CNRS, LCTS, France

HTCMC-12 Symposium 2- Fibers, Preforms, and Interphases

HTCMCS2-New Developments in Oxide and Non-Oxide Ceramic Fibers

Room: Shorebreak 1

Session Chair: Kazuya Shimoda, National Institute for Materials Science (NIMS)

1:30 PM

(HTCMC-S2-009-2026) Development of a pyrolysis method for SiC fibers with protection against oxygen exposure (Invited)

T. Goto^{*1}; K. Hofuku¹; R. Iuchi¹

1. Kabushiki Kaisha Kureha Chuo Kenkyujo, New Business Development Department, Japan

2:00 PM

(HTCMC-S2-010-2026) General atomics SiGA™ SiC fiber overview

J. Brown¹; D. Wegrzyn¹; H. Park¹; S. Fan¹; J. Hepp¹; I. Ivanov^{*1}; H. Khalifa¹

1. General Atomics Electromagnetic Systems Group, Nuclear Technologies and Materials (NTM), USA

2:20 PM

(HTCMC-S2-011-2026) Integrated development of oxide and nonoxide ceramic fibres from precursor to pilot scale at Fraunhofer ISC Center HTL (Invited)

J. Maier^{*1}

1. Fraunhofer-Zentrum für Hochtemperatur-Leichtbau HTL, Germany

2:50 PM

(HTCMC-S2-012-2026) Metal oxide nanowires, nanofibers, and 3D non-woven mats by high-throughput electrospinning

P. Gouma^{*1}

1. The Ohio State University, MSE, USA

3:10 PM

Break

HTCMCS2- Performance of Interfaces/Interphases in Extreme Environments

Room: Shorebreak 1

Session Chair: Elizabeth Opila, University of Virginia

3:30 PM

(HTCMC-S2-013-2026) Performance of crystalline, amorphous, and Si-doped BN coatings in steam environments (Invited)

F. W. Zok^{*1}; V. Christensen¹

1. University of California Santa Barbara College of Engineering, Materials, USA

4:00 PM

(HTCMC-S2-014-2026) Corrosion of BN/SiC coated SiC fibers in a silicon melt infiltration process

J. Schmidt^{*1}; A. Kenschak¹; J. Maier¹

1. Fraunhofer-Zentrum für Hochtemperatur-Leichtbau HTL, Germany

4:20 PM

(HTCMC-S2-015-2026) Use of silicon alloys to preserve BN-SiC interphases in SiC/SiC mini-composites processed by liquid silicon infiltration

K. Postler^{*1}; J. Moosburger-Will¹; D. Koch¹

1. Universität Augsburg, Institute of Materials Resource Management, Germany

4:40 PM

(HTCMC-S2-016-2026) Intermediate temperature oxidation of SiC/BN/SiC CMCs

S. Holles^{*1}; E. Opila¹

1. University of Virginia, USA

HTCMC-12 Symposium 4- Innovative Design, Advanced Processing and Manufacturing Technologies in Non-oxide and Oxide Composites

HTCMCS4- Characterization and damage assessment

Room: Silver Pearl 1

Session Chair: Masaki Kotani, Uchu Koku Kenkyu Kaihatsu Kiko Koku Gijutsu Bunion

1:30 PM

(HTCMC-S4-036-2026) Material properties of high temperature resistant CMC (Invited)

T. Nakamura^{*1}; N. Yamazaki¹; H. Hirano¹

1. IHI Corporation, Japan

2:00 PM

(HTCMC-S4-037-2026) Ultra-high and high temperature ceramic matrix composites aimed for hypersonic applications (Invited)

L. Baier^{2,1}; M. Friess^{*2,1}; I. Petkov^{2,1}; O. Schatz^{2,1}; O. Hohn²

1. DLR - German Aerospace Center, Institute of Structures and Design, Germany
2. Deutsches Zentrum für Luft- und Raumfahrt DLR, Germany

2:30 PM

(HTCMC-S4-038-2026) Ultra-fine and ablation-resistant UHTC composites for rocket nozzle applications (Invited)

S. Lee^{*1}; K. Kim²; V. Nguyen¹

1. Korea Institute of Materials Science, Republic of Korea
2. Korea Advanced Institute of Science and Technology, Republic of Korea

3:00 PM

Break

3:20 PM

(HTCMC-S4-039-2026) Chemophysical crack-healing mechanisms through N₂ annealing in SiC coatings on C/C composites

J. Baek³; Y. Zhang³; B. Lim¹; H. Jung²; I. Sihn¹; S. Lee^{*3}

1. DaiYang, Republic of Korea
2. SPACEPRO, Republic of Korea
3. Purdue University, USA

3:40 PM

(HTCMC-S4-040-2026) Ultrasonic Machining (Ultrasonic Impact Grinding) of SiC/SiC CMCs

E. Norton^{*1}

1. Bullen Ultrasonics Inc, R&D, USA

HTCMC-12 Symposium 6- Carbon/Carbon – Carbon Fiber Reinforced Carbon Composites

HTCMCS6- Mechanical and thermal properties, Application and performance

Room: Pelican

Session Chair: Matthias Krodel, ECM - Engineered Ceramic Materials GmbH

1:30 PM

(HTCMC-S6-001-2026) Studying and prediction of microstructures and mechanical properties of C/C-materials (Invited)

N. Langhof^{*1}; F. Wich¹; M. Moos^{3,1}; S. Schafföner^{2,1}

1. University of Bayreuth, Ceramic Materials Engineering, Germany
2. University of Bayreuth, Chair of Ceramic Materials Engineering, Germany
3. Universität Bayreuth, Germany

2:00 PM

(HTCMC-S6-002-2026) Dependence of graphitization kinetics on atomic mobility in hard and soft carbon via XRD

C. R. Dixon^{*1}; J. Wiggins²

1. University of Southern Mississippi, Polymer Science and Engineering, USA
2. University of Southern Mississippi College of Arts and Science, Polymer Science and Engineering, USA

2:20 PM

(HTCMC-S6-003-2026) Altering crystallite dimensions in benzoxazine derived carbon through iron catalyzed graphitization

T. Schneider¹; C. R. Dixon^{*1}; J. Wiggins²

1. University of Southern Mississippi, Polymer Science and Engineering, USA
2. University of Southern Mississippi College of Arts and Science, Polymer Science and Engineering, USA

2:40 PM

(HTCMC-S6-004-2026) Test and progressive failure analysis of a 2.5D carbon-carbon brake disk

G. J. Janszen^{*1}; A. Airolidi¹; E. Novembre¹; M. Gallo¹; R. Passoni²; A. Tasca²

1. Politecnico di Milano, Department of Aerospace Science and Technology, Italy
2. Brembo NV, Italy

3:00 PM

Break

HTCMCS6- Material, process development

Room: Pelican

Session Chair: Matthias Krodel, ECM - Engineered Ceramic Materials GmbH

3:20 PM

(HTCMC-S6-005-2026) Pathways to high-interlaminar shear strength carbon-carbon (Invited)

B. Goodman^{*1}

1. Goodman Technologies, LLC, USA

3:50 PM

(HTCMC-S6-006-2026) Near-net shape Noobed 3D fabric pre-forms - Key to accelerate wider adoption of CMCs (Invited)

P. Khokar^{*1}; N. Khokar¹

1. Fureho AB, Sweden

4:20 PM**(HTCMC-S6-007-2026) A novel high-char-yield thermoplastic precursor route for potential net-shape carbon-carbon composites fabrication (Invited)**R. Downes*¹

1. FSU, Industrial and Manufacturing Engineering, USA

4:50 PM**(HTCMC-S6-008-2026) Low-density carbon nanotube yarn graphitized Laminates (Invited)**C. Evers*¹

1. Florida State University, USA

HTCMC-12 Symposium 9- Joining and Integration Technologies for Ceramic Matrix Composites**HTCMCS9- Joining of CMCs to CMCs or ceramics**

Room: Silver Pearl 2/3

Session Chairs: Carla Malinverni, Politecnico di Torino; Monika Tatarikova, Ustav anorganickej chemie Slovenska akademia vied

1:30 PM**(HTCMC-S9-001-2026) Joining of SiC and SiC_x/SiC: Focused on Si-C reaction bonding (Invited)**S. Park¹; S. Joo¹; J. Jung¹; D. Yoon*¹

1. Yeungnam University, School of Materials Science and Engineering, Republic of Korea

2:00 PM**(HTCMC-S9-002-2026) Investigation of joining and repair techniques for oxide-oxide ceramic matrix composites**J. Alexander*¹; J. Binner²

1. University of Birmingham, United Kingdom

2. University of Birmingham, Ceramic Science & Engineering, United Kingdom

2:20 PM**(HTCMC-S9-003-2026) Novel joining of high-entropy ceramics (HfTaZrNbTi)C and Cf/SiC composites with high-entropy alloy interlayers**N. Hosseini¹; S. Gambaro²; F. Valenza²; S. sahin.ates@tubitak.gov.tr²; Z. Chlup³; A. Kovalcikova³; M. Tatarikova³; I. Dlouhy⁴; P. Tatarko*¹

1. Ustav anorganickej chemie Slovenska akademia vied, Ceramics, Slovakia
2. Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia Consiglio Nazionale delle Ricerche Sede di Genova, Italy
3. Ustav materialoveho vyskumu Slovenskej akademie vied, Slovakia
4. Ustav fyziky materialu Akademie ved Ceske republiky, Czechia
5. Tubitak Marmara Arastirma Merkezi, Turkey

2:40 PM**(HTCMC-S9-004-2026) Development and integration of high-temperature ceramic matrix composites using refractory transition metals-based alloys**M. Tatarikova*⁵; H. Ünsal⁵; S. sahin.ates@tubitak.gov.tr²; F. Valenza¹; X. Zhou¹; V. Casalegno³; P. Tatarko¹

1. Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia Consiglio Nazionale delle Ricerche Sede di Genova, Italy
2. Marmara Universitesi, Turkey
3. Politecnico di Torino, DISAT, Italy
4. Chinese Academy of Sciences Ningbo Institute of Materials Technology and Engineering, China
5. Institute of Inorganic Chemistry, Slovak Academy of Sciences, Department of Ceramics, Slovakia

3:00 PM**PPP- Effects of filler composition on the joint properties of SiC joined by Si-C reaction bonding****3:02 PM****Break****HTCMCS9- Design and Modeling**

Room: Silver Pearl 2/3

Session Chair: Dang-Hyok Yoon, Yeungnam University

3:22 PM**(HTCMC-S9-005-2026) Evaluating CMC assemblies using a discrete model for composite (DM4C) approach (Invited)**M. Flores*¹; A. Deleo¹; S. Phenisee¹; D. Pelessone¹

1. ES3, USA

3:52 PM**(HTCMC-S9-006-2026) Multiscale characterization of fusion-welded SiC-based UHTCs using an experimental-ICME approach**A. Emdadi*¹; J. Watts¹; A. Ayon¹

1. Missouri University of Science & Technology, Materials Science and Engineering, USA

HTCMCS9- Testing and NDE

Room: Silver Pearl 2/3

Session Chair: Mark Flores, The University of Texas El Paso College of Liberal Arts

4:12 PM**(HTCMC-S9-007-2026) Evaluation of YAS glass-ceramic-joined SiC/SiC CMCs under direct flame exposure for steelmaking applications (Invited)**C. Malinverni*¹; V. Casalegno¹; P. Bertrand²; J. Maier³; C. Prentice⁴; M. Salvo¹

1. Politecnico di Torino, DISAT, Italy
2. Univ. de Technologie de Belfort-Montbéliard, France
3. Fraunhofer-Zentrum für Hochtemperatur-Leichtbau HTL, Germany
4. ATL, Archer Technicoat Ltd, United Kingdom

4:42 PM**(HTCMC-S9-008-2026) Improving XCT fidelity for SiC/SiC end-plug joints using super-resolution reconstruction methods**J. D. Arregui-Mena*¹; A. K. Ziabari²; O. Rahman²; T. Koyanagi³

1. Oak Ridge National Lab, Nuclear Materials Science & Technology Group, USA
2. Oak Ridge National Laboratory, Electrification and Energy Infrastructure Division, USA
3. Oak Ridge National Laboratory, USA

Friday, June 5, 2026

GFMAT-3 Symposium 5- Porous Ceramics for Advanced Applications Through Innovative Processing**GFMAT55- Porous Ceramics for Advanced Applications Through Innovative Processing**

Room: Shorebreak 1

Session Chairs: Jianfeng Yang, Xi'an Jiaotong University; Adriana Joyce, Adva Cera

8:30 AM**(GFMAT-S5-001-2026) Fabrication of porous silicon nitride ceramics with macro-sized pores by organic ball template via gel-casting or die-pressing method (Invited)**J. Yang*¹; F. Li¹; J. Li¹; B. Wang¹

1. Xi'an Jiaotong University, State Key Laboratory for Mechanical Behavior of Materials, China

9:00 AM**(GFMAT-S5-002-2026) Novel processing method and material properties for nuclear-grade silicon carbide foam**O. Trieu*¹; J. Zhang¹; O. Godinez¹; T. Abrams²; G. Jacobsen¹

1. General Atomics Electromagnetic Systems Group, USA
2. General Atomics, USA

9:20 AM**(GFMAT-S5-003-2026) Control of hierarchical porosity in alumina through additive process design**A. Joyce*¹

1. Adva Cera, USA

HTCMC-12 Symposium 1- Computational Modeling and Design of New Materials and Processes**HTCMCS1- Simulation of materials degradation**

Room: Osprey

Session Chair: Guillaume Couegnat

8:30 AM**(HTCMC-S1-010-2026) Microscale Modeling and Simulation of Machining SiC/SiC Composites Produced by Chemical Vapor Infiltration (Invited)**S. Unselde*¹; R. Goller²; D. Koch²

1. Technische Hochschule Augsburg, Mechanical Engineering, Germany
2. Institute of Materials Resource Management, Germany

HTCMCS1- Data mining and first-principles computations

Room: Osprey

Session Chair: Gerard Vignoles, University Bordeaux

9:00 AM**(HTCMC-S1-011-2026) Illuminating early stage oxidation of ZrC from an ab-initio density-functional theory perspective**P. Wurzner²; S. Feld¹; M. Möller¹; B. Chen²; Q. Hong²; Y. Tang*³

1. Technische Universiteit Delft Faculteit Elektrotechniek Wiskunde en Informatica, Netherlands
2. Arizona State University, USA
3. Technische Universiteit Delft Faculteit Luchtvaart- en Ruimtevaarttechniek, Netherlands

9:20 AM**(HTCMC-S1-012-2026) Data-driven composition screening and experimental validation of single-phase high-entropy UHTCs**E. F. Bermudez¹; L. F. Morales¹; A. G. Castellanos*¹

1. The University of Texas at El Paso, Aerospace and Mechanical Engr. Dept., USA

9:40 AM**(HTCMC-S1-013-2026) Tuning the composition of (TiCeZrMoMn)₂O₃ to enhance the structural, mechanical and thermal stability: First principles studies**M. Yadav*¹; Y. Sudha Sistla¹

1. Shiv Nadar Institution of Eminence, Chemical Engineering, India

10:00 AM**Break****HTCMCS1- Modeling of materials processing**

Room: Osprey

Session Chair: Simon Unselde, Technische Hochschule Augsburg

10:20 AM**(HTCMC-S1-014-2026) Modeling thermal-gradient chemical vapor infiltration: The case of SiC deposition using micro-wave heating (Invited)**G. L. Vignoles*¹; R. Bechara²; G. Mangeon¹; N. Bessouet²; S. Jacques²; R. D'Ambrosio⁴; G. Annino⁵; Z. Li⁶; J. Binner⁷

1. University Bordeaux, LCTS - Lab for ThermStructural Composites, France
2. Laboratoire des Composites Thermostructuraux, France
3. CNRS, LCTS, France
4. Istituto per i Processi Chimico-Fisici Consiglio Nazionale delle Ricerche, Italy
5. Istituto per i Processi Chimico-Fisici Consiglio Nazionale delle Ricerche Sede Secondaria di Pisa, Dipartimento di Scienze Chimiche e Tecnologie dei Materiali, Italy
6. University of Birmingham, United Kingdom
7. University of Birmingham, Ceramic Science & Engineering, United Kingdom

10:50 AM**(HTCMC-S1-015-2026) Molecular dynamics simulation for quantitative analysis of melt infiltration**K. Oba*¹; M. Tsuganezawa¹; K. Nishiguchi²; H. Shima²; Y. Nakanishi²; R. Inoue¹; Y. Kogo¹; Y. Arai¹

1. Tokyo Rika Daigaku, Japan
2. Kabushiki Kaisha Mitsubishi Chemical Holdings, Japan

11:10 AM**(HTCMC-S1-016-2026) Preparation of CMC matrices by in-situ nitridation: Modeling combustion synthesis involving gases**G. L. Vignoles*¹; E. Demenois¹; T. Nguyen-Bui^{1,2}; C. Descamps^{1,2}

1. University Bordeaux, LCTS - Lab for ThermStructural Composites, France
2. Safran Ceramics, France
3. CEA/DAM, France

HTCMC-12 Symposium 6- Carbon/Carbon – Carbon Fiber Reinforced Carbon Composites**HTCMCS6- Processing and applications**

Room: Pelican

Session Chair: Bill Goodman, Goodman Technologies, LLC

8:30 AM**(HTCMC-S6-009-2026) Rough laminar pyrocarbon synthesized by CVD in a cold-wall reactor (Invited)**A. Bident²; G. Chollon¹; S. Jacques*¹

1. CNRS, LCTS, France
2. University of Bordeaux, LCTS, France

9:00 AM**(HTCMC-S6-010-2026) Reducing energy consumption in high-temperature processing of carbon composites (Invited)**J. Schmidt*¹

1. Schunk Kohlenstofftechnik GmbH, Germany

HTCMC-12 Symposium 9- Joining and Integration Technologies for Ceramic Matrix Composites**HTCMCS9- Brazing**

Room: Silver Pearl 2/3

Session Chairs: Michael Halbig, NASA Glenn Research Center;

Jose Arregui-Mena, Oak Ridge National Lab

9:00 AM**(HTCMC-S9-009-2026) Joining and integration of ceramic matrix composites to metals for high temperature applications using brazing processes (Invited)**V. J. Prabhu*¹; N. Ludford¹; K. Amin¹; J. Redman¹

1. TWI Ltd, United Kingdom

9:30 AM**(HTCMC-S9-010-2026) Design, fabrication, and integration challenges for silicon carbide-based heat exchangers for thermal management applications (Invited)**M. C. Halbig*³; M. Singh¹; M. Ranaiefar³; Y. Zheng²

1. Ohio Aerospace Institute, USA
2. Northeastern University, Mechanical and Industrial Engineering, USA
3. NASA Glenn Research Center, USA

10:00 AM**Break**